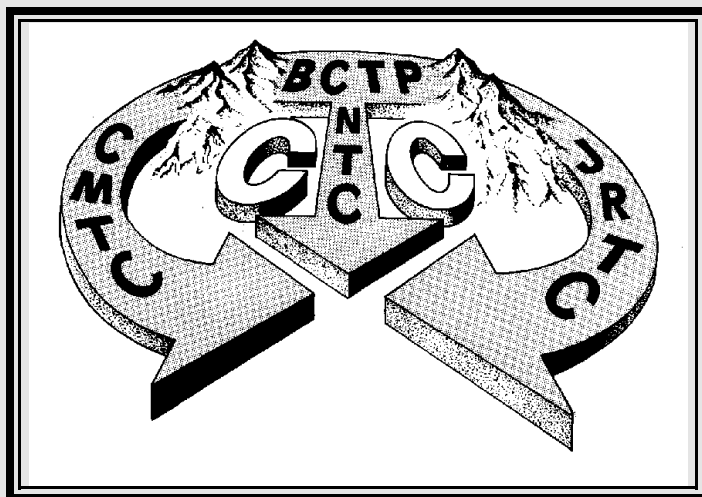


CTC TRENDS

Joint Readiness Training Center (JRTC)

No. 99-7

JUL 99

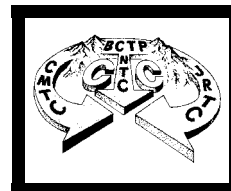


2QFY98 and 3QFY98

**CENTER FOR ARMY LESSONS LEARNED (CALL)
U. S. ARMY TRAINING AND DOCTRINE COMMAND (TRADOC)
FORT LEAVENWORTH, KS 66027-1350**



CTC Trends for JRTC 2QFY98 & 3QFY98



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JRTC TRENDS, 2nd and 3rd Qtr FY 98

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INTELLIGENCE BOS

(Trends are numbered sequentially for cross-reference and are not in any priority order.)

Positive Performance

TREND 1: Crater analysis. Commanders at all levels are more aware of the importance of conducting crater analysis after the receipt of opposing force (OPFOR) indirect fires. The information provided in the shell report is passed to the S-2 to conduct predictive counter-mortar analysis of the enemy situation. This information has led to the successful capture of several OPFOR mortars during the low-intensity conflict (LIC) phase.

(TA 5.2.1 *Collect Information on Situation*)

Needs Emphasis

TREND 1: Use of scouts. Scouts must be involved in reconnaissance and surveillance (R&S) planning. According to **FM 7-20, *The Infantry Battalion***, "Scouts should concentrate on the most important information requirements – they should not be overtasked."

OBSERVATIONS:

1. Units have difficulty with the employment of scouts in the execution of R&S plans.
2. R&S planning is often conducted independent of the daily targeting meeting and seems to be an afterthought to the course of action development process rather than the driver for situation development and confirmation.

RESULT: Poor use of the scouts produces real time intelligence lacking necessary situational development and not confirming intelligence already gathered by other means.

Techniques:

1. Immediately following mission analysis, the planning staff identifies a dedicated R&S planning group (i.e., S-3 air, battle information coordination center [BICC], fire support NCO [FSNCO], medical platoon leader) to develop priority intelligence requirements (PIR) for continued planning and an R&S plan to confirm the enemy situation template.
2. Reference: **FM 7-92, *The Infantry Reconnaissance Platoon and Squad***. Chapter 1 discusses the relationship between the battalion staff and the scout platoon during planning, while chapter 2 focuses on the battalion's role in command and control (C2) of the reconnaissance platoon.

(TA 5.2 *Collect Information*)

TREND 2: Collection tasks not linked to the scheme of maneuver.

OBSERVATIONS:

1. Collection managers are absent from the wargaming process.
2. More often than not, the collection plan is written once the Military Decision-Making Process (MDMP) is complete.

RESULTS: Collection tasks are written to fit the scheme of maneuver rather than operations being driven by intelligence. This is especially prevalent during the movement-to-contact phase of operations at the JRTC and presents a key challenge for the brigade intelligence team.

Techniques:

1. Review **FM 101-5, *Staff Organization and Operations***. The wargame begins the process of "finalizing the reconnaissance and surveillance plan and graphics form the basis for the collection plan."
2. The basic TTP for solving most of the collection management challenges is to incorporate the development of the initial plan into the wargaming process.
3. Since subject matter experts for each BOS attend the wargame, any conflicts concerning collection capabilities and/or limitations can be worked out prior to the draft collection plan being finalized.

(TA 5.2 *Collect Information*)

TREND 3: Overuse of the military intelligence (MI) company.

OBSERVATIONS:

1. During the defense, the MI company is assigned multiple tasks which it usually cannot accomplish to the level of detail required by the brigade S-2.
2. Example: The direction-finding accuracy of ground-based signals intelligence (SIGINT) assets are usually overestimated. The focus of SIGINT should be on one or perhaps two primary targets to maximize the positioning limitations of the collectors.
3. Ground surveillance teams employing the remotely monitored battlefield sensor system (REMBASS) are given too many areas to cover in too little time.

RESULT: Collection managers do not consider the limitations of REMBASS: it can only be emplaced as quickly as the operators can navigate to the monitoring site (a lengthy combat operation) and it cannot distinguish friendly from enemy moving target indicators.

Technique: The collection manager, either the senior assistant S-2 or the MI company commander, should bring a list to the wargaming process of all collection assets available within the brigade combat team as well as those which can be requested through division (i.e., QUICKFIX). As named areas of interest (NAI) are assigned during the course of the wargame, the collection manager ensures that the scheme of maneuver is linked to the required *start/stop* and *latest time intelligence is of value (LTIOV)* per collection task.

(TA 5.2.1.2 *Collect Physical Environment Information*)

TREND 4: Terrain products. Divisions are now deploying elements of their organic terrain analysis detachments to support maneuver commanders and intelligence officers.

OBSERVATIONS:

1. Commanders and their staffs are not familiar with the capabilities and limitations of terrain teams.
2. Commanders do not routinely request a package of standard terrain analysis products to support operations.
3. These products, once delivered, are not generally "pushed" to the rotational unit because of the lack of habitual training relationships.

RESULT: Units do not use the tools available to determine the impact of terrain on operations. Notable examples include the impact of terrain on:

- Mobility.
- Direct fire engagement for long-range weapons.
- Line-of-sight communications.
- Locations of suitable water sources.
- The rain and its effect on the strength of local soils.

Techniques:

1. Review **FM 34-130, *Intelligence Preparation of the Battlefield***.
2. Request standard terrain analysis from the division terrain team and train extensively on its use.
3. Integrate slice element requirements, such as civil affairs and psychological operations, into terrain analysis requests in accordance with **FM 34-36, *Special Operations Forces Intelligence and Electronic Warfare Operations***.

(TA 5.2.1.2 *Collect Physical Environment Information*)

TREND 5: Under use of non-standard collection assets.

OBSERVATION: Infantry battalions are still receiving the bulk of assigned named areas of interest (NAI).

RESULT: Highly capable intelligence gathering units such as aviation, military police (MP), and the forward support battalion (FSB) receive little to no collection focus, due in part to the collection manager's lack of familiarity with the capabilities and limitations of these units.

Technique: The basic tactics, techniques, and procedures (TTP) for solving most of the collection management challenges are incorporated in the wargaming process. The collection manager, either the senior assistant S-2 or the military intelligence (MI) company commander, should bring a list to the wargaming process of all the collection assets available within the brigade combat team as well as those which can be requested through division (i.e., QUICKFIX). As NAIs are assigned during the course of the wargame, the collection manager ensures that the scheme of maneuver is linked to the required *start/stop* and *latest time intelligence is of value (LTIOV)* per collection task. Since the subject matter experts for each

BOS attend the wargame, any conflicts concerning collection capabilities and/or limitations can be worked out prior to the draft collection plan being finalized.

(TA 5.2.1.3 Collect Information on Social/Political/Economic Environment)

TREND 6: The targeting process. The targeting and synchronization meeting is an important tool used by maneuver brigades and battalions during rotations.

OBSERVATIONS:

1. The targeting and synchronization process allows the brigade to ensure the effective servicing of targets as well as the integration and synchronization of all the brigade's battlefield operating systems.
2. Many commanders use the targeting and synchronization process to drive their operations. One of the products from the meeting is a fragmentary order (FRAGO).

RESULTS:

1. The nuclear, biological, and chemical (NBC) officer is not effectively involved in the targeting process, nor are the assets he oversees.
2. The chemical officer must be involved in the targeting process if he is going to have any timely influence on the battle from an NBC standpoint.

Techniques:

1. The chemical officer must be involved in the targeting process.
2. Reference **FM 6-30-10, *The Targeting Process***.

(TA 5.2.2 Collect Target Information)

TREND 7: Using intelligence indicators for targeting. The targeting meeting is essential in working out the targeting priorities and details.

OBSERVATIONS:

1. S-2s and their supporting management of information control officer (MICO) still do not provide detailed future projections of enemy courses of action to commanders and staffs during the targeting process.
2. The S-2s are not prepared for the targeting meetings.
3. S-2s lack the methodology for turning enemy intelligence into friendly action.

RESULTS:

1. S-2s arrive at the targeting meeting not prepared to discuss recent battle damage assessment (BDA), R&S results, or collection asset availability.
2. The S-2s do not have situation and event templates of probable enemy activities for the targeting period.

Techniques:

1. It is essential to make the items listed above--BDA, R&S results, collection asset availability, and template of future activities--a part of the section's internal updates.

2. If each of these items is updated several times a day, recent products will always be available for use in either a targeting process or to support any future planning. No lengthy preparation for a targeting session would be required.

3. Review **CALL Newsletter No. 97-8**, Feb 97, *Search and Attack!*, Appendix A.

4. Review the JRTC video, "How to Conduct Targeting Meetings."

(TA 5.2.2 *Collect Target Information*)

TREND 8: Collection management by the S-2.

OBSERVATIONS:

1. Task force S-2s at brigade and battalion level do not manage their collection assets well.
2. S-2s are often not well practiced in the basic techniques of collection management as discussed in **FM 34-2, *Collection Management***.
3. S-2s are often unaware of the capabilities and limitations of the systems at their disposal.

RESULTS:

1. S-2s do not consider all systems on the battlefield as collectors.
2. Certain collection systems are being underemployed or are expected to perform tasks well beyond their capabilities.

Techniques:

1. S-2s should review and practice staff training exercises using the techniques discussed in **FM 34-2, *Collection Management***.
2. S-2s need to familiarize themselves and their soldiers with the basic capabilities and limitations of each system. The management of information control officer (MICO) commander and his soldiers is the best place to look for this expertise.
3. The S-2 section's field SOP and the tools used during collection management should prompt the S-2 to consider assets not often tasked, such as the forward support battalion (FSB) and other support units.

(TA 5.3 *Process Information*)

TREND 9: Poor management of the collection plan.

OBSERVATIONS:

1. Brigade S-2s generally treat the collection plan as a "fire and forget" weapon.
2. During the movement-to-contact phase at the JRTC, brigade S-2s continue to assign named areas of interest (NAI) to each individual enemy icon displayed on the situation template.

RESULTS:

1. Once forwarded down to the battalions, little to no visibility is maintained on NAI coverage, identifying collection gaps, and deconflicting redundant coverage.
2. NAIs often do not relate to priority intelligence requirements (PIR) or to commanders' decisions.

Techniques:

1. The basic tactics, techniques, and procedures (TTP) for solving most of the collection management challenges is to incorporate the development of the initial plan into the wargaming process.
2. The collection manager, either the senior assistant S-2 or the MI company commander, should bring a list to the wargaming process of all the collection assets available within the brigade combat team as well as those which can be requested through division (ie. QUICKFIX).
3. As NAIs are assigned during wargaming, the collection manager ensures that the scheme of maneuver is linked to the required *start/stop* and *latest time intelligence is of value (LTIOV)* per collection task.
4. BOS subject matter experts should attend the wargame and resolve any conflicts concerning collection capabilities and/or limitations prior to the draft collection plan being finalized.

(TA 5.3 Process Information)

TREND 10: Template the chemical threat.**OBSERVATIONS:**

1. Chemical personnel at both brigade and battalion often fail to produce a template based on their analysis; they suspect the possible employment of chemical agents on the battlefield.
2. A sound template will drive the NBC decontamination and reconnaissance effort. The chemical officer must possess an understanding of how the enemy fights; this can be found in the enemy order of battle.

RESULT: Once the chemical officer understands the enemy order of battle, he need only conduct reverse analysis to ascertain where he thinks the enemy will employ agents and then depict these locations on his template.

Techniques:

1. The chemical officer must design a decontamination and reconnaissance plan that covers the depth and width of his battle space.
2. The chemical officer must coordinate with the S-2 to ensure that they are presenting the same picture for their respective commanders.

(TA 5.4.3 Prepare Tactical Intelligence Reports)

TREND 11: Intelligence preparation of the battlefield (IPB). Commanders lack sufficient detail on the terrain and enemy to plan for and synchronize operations.

OBSERVATIONS:

1. Analysis of terrain and weather by battalion and brigade intelligence officers does not pass the "so what" test. Although forecasts and light tables are usually covered in detail, the impact of these conditions on specific operations is rarely mentioned.
2. Too many S-2s do not understand the definitions of *key* and *decisive* terrain, nor do they accurately brief these to the commander.

3. There is still a common lack of understanding for what commanders need to know about the enemy to shape friendly operations. It is not enough to tell the commander "where" the enemy is. Battalion and brigade intelligence officers need to study the fundamentals in **FM 34-130, *Intelligence Preparation of the Battlefield***.

RESULTS:

1. Commanders often lose visibility of weather and light factors throughout the course of mission planning.
2. The commander's decision on where to defend or attack is usually made hastily, often prior to the first S-2 slide being briefed.
3. A similar lack of detail is apparent in S-2 situational templating. Doctrinally correct, set piece situational templates of the enemy using the most up-to-date symbology is a positive trend.

Techniques:

1. Intelligence officers can win back this apparent lack of confidence by briefing their commanders in terms that they understand. Displaying a doctrinally correct modified combined obstacle overlay (MCOO) is not enough. The terrain should be broken down into elements which will impact the enemy as well as friendly operations. Begin with the bottom line up front: where the commander can best defend or attack and why. For example: "Sir, I'll begin my briefing on terrain within the area of operations by highlighting Hill 109 as the decisive terrain for the brigade defense. We must defend this ground to be successful against the enemy's 6th motorized attack. Both mechanized avenues of approach 1 and 2 converge on Hill 109, making it key to the enemy's success. Given the recent rain and soil composition, we should have no problem digging individual fighting positions without extensive engineer support. Further, the forward slope of Hill 109 provides 500 to 1500 meter clear fields of fire, making it the best place available to maximize use of our TOW weapon systems."

2. S-2s can increase understanding on weather by including a graphic segment of light/lunar data as well as the 72-hour forecast on the decision support template (DST). Additionally, intelligence officers should update commanders on light and weather during combined arms rehearsals. Again, S-2s need to brief the bottom line up front: how to use light and weather to the best advantage (and the enemy's disadvantage) during the execution of operations. For example: "Sir, given the enemy's limited night vision capabilities, I suggest we LD no earlier than moon set or 2350 local time. This will offset the 87 percent illumination on the evening of the attack. Heavy early morning fog between 0400 and 0545 should allow adequate concealment for Alpha and Bravo Companies to move into their attack and support-by-fire positions. Beginning mean nautical time (BMNT) is at 0550. A good window for conducting a concealed breach of the enemy's perimeter would be between 0530 and 0545."

3. Brigade and battalion S-2s must be prepared to provide the commander with the same level of detail on the enemy as is briefed by the S-3 on friendly operations.

4. A recommended TTP is to use the *method of developing courses of action* format found in **FM 7-20, *The Infantry Battalion***.

5. Know and brief the following on the enemy:

- Determine the decisive point: where the enemy commander plans to maximize his combat power against a perceived vulnerability; sometimes linked to *decisive terrain* or a mission depending on a piece of ground which must be seized for the enemy to accomplish his mission.
- Determine supporting efforts: other factors employed by the enemy commander to ensure the main effort's success. For example: rear area combat operations, air strikes, and deception.
- Determine task and purpose: essential tasks of the enemy's subordinate units and what the enemy is attempting to achieve.
- Identify types of forces required to accomplish the mission: enemy order of battle.
- Display suspected enemy control measures: enemy boundaries (down to the lowest level).

(TA 5.4.4 Prepare Reports on Enemy Situation)

TREND 12: Determining decision points.

OBSERVATION: The S-2s are not developing courses of action which allow the commander to be a decisionmaker.

Technique: Like the S-3, battalion and brigade S-2s should prepare an enemy most probable and most dangerous course of action (COA) sketch. This enhances the clarity of the enemy's scheme of maneuver. This sketch should illustrate the maneuver aspects of the COA to include boundaries, threat objectives, task/purpose (by subordinate unit), and task organization. The goal for this sketch and the associated statement on enemy COA is to tell the commander *what* tasks the enemy is attempting to execute against friendly forces, *when* enemy action is expected to begin or end, *where* objectives the enemy is attempting to seize/defend or zone of operations assigned are, *how* the enemy will execute his scheme of maneuver and the associated purposes of his elements, and *why* or the desired intent of the enemy's operations.

(TA 5.4.4 Prepare Reports On Enemy Situation)

MANEUVER BOS

Positive Performance

TREND 1: Move tactically. Units consistently demonstrate the ability to move tactically during daylight conditions. Soldiers use proper individual movement techniques under direct fire. Squads, platoons, and companies are adept at using proper movement techniques and formations based upon terrain and likelihood of enemy contact.

(TA 1.1 Move)

TREND 2: Pick-up zone/landing zone (PZ/LZ) operations. Units that are successful in PZ/LZ operations have one PZ/LZ control NCO and three separate PZ/LZs. One PZ/LZ is used for medical evacuation (MEDEVAC), one for incoming logistical resupply (for A Company), and one to sling-load forward to the combat trains. Each PZ/LZ is marked separately with its own day and night markings (i.e., VS-17 panels, IR chemlites). The PZ/LZ control NCO has communications with the aircraft with either a man-pack or vehicle-mounted radio. All aircraft contact PZ/LZ control on an established frequency and facilitate the execution of the Army airspace command and control (A2C2) in and around the brigade support area (BSA).

(TA 1.1.1.4 Close into Tactical Position)

Needs Emphasis

TREND 1: Forward area rearming/refueling point (FARP) operations.

OBSERVATION: In the FARP there is an organization problem caused by the direction of landing and departing aircraft. The FARP should be positioned so that aircraft can land into the wind.

Technique: A marking system, such as an inverted Y, should be established to inform the aircraft of the approach pattern. This technique will prevent confusion of the aircraft positioning.

(TA 1.1.1.3 Move Through Air)

TREND 2: Reliance on aircraft systems/technology.

OBSERVATION: Many of the units training at the JRTC are flying OH-58D Kiowa Warriors or AH-64 Apaches. The pilots tend to rely heavily on both the navigation systems and the target acquisition systems of the aircraft.

RESULT: The pilot basic skills of navigation with the 1:50,000 map and search techniques using standard 20/20 vision are not used.

Techniques:

1. Commanders and instructor pilots should ensure aircrews remain proficient in the basic skills of navigation with a map, especially at nap of the earth altitudes. They should also reinforce training procedures involving search techniques.
2. Aviators should be capable of performing accurate target acquisition. Reference the aircraft specific aircrew training manual.

(TA 1.1.1.3 Move Through Air)

TREND 3: Company occupation plan.**OBSERVATIONS:**

1. Companies rotating through the JRTC are having a tough time occupying company areas, especially at night.
2. The companies either do not have standing operating procedures (SOP) that cover occupation, or have an SOP but do not follow it.

RESULT: The company area becomes very congested and task-saturated with support missions, and priority of work becomes unsynchronized.

Techniques:

1. The company must establish a solid SOP on occupation and follow it.
2. The focal point of the entire occupation process is the advanced cadre/echelon/quartermaster party officer in charge (OIC) or non-commissioned officer in charge (NCOIC). They have to know the minimum- and maximum-size terrain needed to successfully accommodate the company occupying a new site.
3. The OIC or NCOIC must be the commander's representative to make terrain decisions in conjunction with the battalion S-3's occupation plan.

(TA 1.1.1.4 Close in Tactical Position)

TREND 4: Platoon leader actions on contact.

OBSERVATIONS: Many platoon leaders fail to send an initial contact report or a more detailed follow-up report to their company commander. Quite often the platoon leader performs little or no assessment and executes a "knee-jerk reaction" in the form of a hasty attack. He has no "tactical patience" to develop the situation as necessary.

RESULTS:

1. Failure to send a contact report causes numerous command and control problems, hampers unity of effort, and often prevents a unit from responding quickly to a given situation.
2. It also limits the company commander's options, as he has one platoon decisively engaged almost immediately.
3. This initial radio report relays as much information as is known (usually only that the unit has contact and from which direction). The platoon leader should assess the following before rushing into a course of action:
 - Size of the enemy force.
 - Location of enemy.

- Intent of the enemy (stay and fight, maneuver, withdraw).
 - Type of enemy (infantry, armored, motorized).
 - Terrain (hasty analysis; i.e., routes, dominant/key terrain, obstacles).
4. This FO reaction is an important point because too often leaders get so involved in the "infantry on infantry" fights that they neglect to use all available assets (in this case, indirect fires). This is a bad habit, further reinforced by the difficulty in replicating effects of indirect fires during training.

Techniques:

1. When a platoon makes contact, the radio telephone operator (RTO) should immediately send a quick message to the company commander's RTO while the platoon leader is assessing the situation. This is rarely done.
2. The forward observer (FO) must automatically be generating a call for fire.
3. During WWII General Gavin, the commander of the 82nd Airborne Division, taught his subordinates to automatically call for enough indirect fire to suppress the enemy before beginning to maneuver (and often before beginning suppression with direct fires).
4. As soon as the platoon leader has assessed the situation, he must send a more detailed report in SALUTE-A format (the "A" being the action that he is taking and any help he requires from the company).
5. Platoon leaders must develop tactical patience and still be decisive and aggressive. They can control and adjust as necessary the "tempo" of the operation, finding the appropriate mix of mass (firepower) and speed required to keep pressure on the enemy and destroy him.

(TA 1.2 Engage Enemy)

TREND 5: Direct fire planning and fire control.

OBSERVATIONS:

1. Many tactical leaders do not understand the basic principles of direct fire control (focus, distribute, and shift) and do not plan properly to achieve maximum effects with their weapons systems.
2. Many squad leaders (especially weapons squad leaders) fail to distribute fires throughout the width and depth of their assigned target area.
3. Very few team and squad leaders use fire commands.

RESULT: These leaders do not control the rates of fire of their support element and run out of ammunition at a crucial point in the battle.

Techniques:

1. Units must conduct laser spot tracker (LST) on the direct fire control, conduct leader machine gun training, and review the principles of direct fire control discussed in the **Soldiers Handbook 7-45, Fire Planning Handbook**, Jun 93.
2. Leaders must specify direct fire control measures/responsibilities for each target area in the operations order (OPORD).
3. Leaders must establish and practice methods of shifting and re-focusing fires during a fight (such as proper use of fire commands, tracers, laser pointers, and M203 spotter rounds).

They (particularly platoon leaders and company commanders) can assist the support by fire element leader with ammunition management by giving him an estimated time that it will take to maneuver into a position to assault the enemy. This allows the support by fire (SBF) element leader to calculate rates of fire for his weapons systems during that timeframe. This should result in maintaining direct fires for the duration of the maneuver.

4. If a unit is already low on ammunition, the assault element leader can give instructions to the SBF element leader to save the last 100 rounds per machine gun. These last 100 rounds will be fired at the assault element leader's command when enemy suppression is needed most (usually during the breach or just prior to the initial assault.).

5. The recommended basic load for the M240 series machine gun is 1200 rounds of 7.62-mm ammunition.

(TA 1.2.1 Employ Direct Fire)

TREND 6: Scheme of maneuver for search and attack.

OBSERVATIONS:

1. Although most company commanders can provide a correct doctrinal definition of mutual support, units are unable to execute the find, fix, and finish methodology against a quick hitting and elusive enemy.

2. The density of the vegetation at the JRTC is such that if squads and platoons are more than 200-300 meters apart, it often takes too long to maneuver to support an element in contact when the contact often lasts seconds/minutes.

RESULTS:

1. A few company commanders are unable to translate mutual support into the appropriate time/distance relationship between elements on the ground. Mutual support is defined as "that support which units render each other against an enemy because of their assigned tasks, their positions relative to each other and to the enemy, and their inherent capabilities." (**FM 101-5-1, *Operational Terms and Graphics***, p. 1-107)

2. Platoons continually make contact with the nearest supporting element a kilometer or more away. Most commanders employ either a linear scheme of maneuver with two or three platoons abreast or a decentralized independent platoon/squad search technique. Once contact is made, both of these techniques rely on rapid movement of supporting elements to converge on and fix the enemy. Units find it difficult, if not impossible, to overcome the mobility factor: the enemy moves faster or as fast as you do.

Techniques:

1. The decisive point technique (outlined in **CALL Newsletter No. 97-8, *Search and Attack! Tactics, Techniques, and Procedures***, pp II-9 to II-10) executed at the company level applies the "hammer and anvil technique" approach. One platoon forms the fix (anvil) element by establishing ambushes along likely lines of drift into and out of the search zone. The remaining platoons (hammer) search the zone, forcing the enemy toward the ambushes.

2. Other references include: **FM 7-10, *The Infantry Rifle Company***, pp. 4-14 to 4-19; **FM 7-20, *The Infantry Battalion***, pp. 3-18 to 3-23.

(TA 1.2.2 *Conduct Close Combat*)

TRENDS 7: Integrate direct fire with maneuver.

OBSERVATIONS:

1. Many units fail to effectively manage limited planning time.
2. In these units there is a tendency to spend too much time on communication (commo) checks, formation/line-up, and forward area re-arming point (FARP) operations.

RESULTS:

1. These same units spend very little time on the actual scheme of maneuver and, more specifically, actions on contact or engagement area operations, whichever is appropriate for the mission.
2. Too often there is a failure to plan for action if the aircraft take fire enroute to their screen line or in occupying their attack-by-fire position.

Techniques:

1. Commanders/air mission commanders should focus more of their individual planning efforts to putting bullets on targets or on the execution of detailed reconnaissance.
2. Commanders should allow other "planning cells" or flight members to plan details such as weather, instrument meteorological conditions (IMC) break-up, and FARP operations. This will allow the commander time to focus on the tactical employment of his organization.
3. Specific movement techniques and engagement area operations are found in **FM 17-95, *Cavalry Operations***, and **FM 1-112, *Attack Helicopter Operations***.

(TA 1.4 *Integrate Direct-fire with Maneuver*)

FIRE SUPPORT BOS

Positive Performance

TREND 1: Field artillery (FA) battalion S-2's involvement in the brigade targeting process. FA battalion S-2s are becoming increasingly involved in the brigade targeting process, particularly in analyzing, identifying, and pinpointing opposing forces (OPFOR) mortar locations and caches. The S-2s are attending brigade targeting meetings and are becoming an integral member of the brigade targeting effort.

(TA 2.1.1 *Select Target to Attack*)

TREND 2: Commander/fire support officer (FSO) integration. The *customary relationship between commanders and fire support officers is working well*. Brigade through company commanders and their fire support officers understand the concepts of integrating and synchronizing fires to support the scheme of maneuver. Commanders and FSOs are doing an excellent job of determining when fires are critical and where fires must be placed, and of understanding the restrictions for fires to ensure non-interference with the scheme of maneuver.

(TA 2.3 *Integrate Fire*)

Needs Emphasis

TREND 1: Use of the Precision Lightweight GPS [Global Positioning System] Receiver (PLGR).

OBSERVATION: During the low-intensity conflict (LIC) phase and deliberate attack, most forward observers (FOs) turn their PLGRs off or leave them in the continuous mode setting while moving.

RESULT: When the lead element of the platoon makes contact, the FO is unable to utilize the PLGR to immediately and accurately determine the target location.

Techniques:

1. Ensure that the PLGR is turned on and in the continuous mode setting.
2. Use the PLGR upon contact to send the FO's present location and initiate a fire mission using the polar plot call for fire.
3. Implement the techniques described in "*The PLGR: Techniques and Procedures Forward Observers Can Use To Bring Rapid, Accurate Indirect Fires to the Close Fight*," **Combat Training Center (CTC) Quarterly Bulletin, 4th QTR, FY 96, No. 96-10, Oct 96.**
4. Reference: **TM 11-5825-29-13.**

(TA 2.1 *Process Ground Targets*)

TREND 2: Q36 operations.

OBSERVATIONS:

1. Field artillery planners often do not have an adequate understanding of the firefinder radar system to successfully plan and then execute.
2. Often the *targeting technician*, the fire finder subject matter expert, is not consulted about employment considerations beyond site selection until *after the battle has begun*.
3. Many times field artillery tactical operations centers (TOCs) tend to expect more from the firefinder radar system than it can actually deliver.

RESULTS:

1. Units lose critical time and miss key opportunities trying to *execute unrealistic plans*.
2. The lack of planning and execution knowledge hampers unit planning for future operations.

Techniques:

1. Conduct extensive Home Station training with the firefinder radar system so that both operators and planners understand and accept the system's capabilities and limitations.
2. Conduct professional development classes for both officers and NCOs at Home Station. Gauge the level of detail to the target audience.
3. At Home Station, conduct tactical exercise without troops (TEWT) terrain walks to highlight the unique requirements of the firefinder radar system; i.e., optimum mask angles, positioning considerations, and the effects of vegetation and the terrain.
4. Make the *targeting technician* an integral member of the field artillery battalion staff. Bring the targeting technician into the planning process early.
5. Conduct realistic radar training at Home Station; i.e., limited friendly fire and more hostile fire operations.

(TA 2.1.2.1 Determine System Capabilities)

TREND 3: Call for fire procedures - forward observer (FO).

OBSERVATION: Many FOs initiate calls for fire using non-doctrinal, incomplete formats. Example: calling in a grid location and nothing more.

RESULT: There is a critical loss of time as the firing unit must then request target size, description, and direction.

Techniques:

1. Fire support NCOs and officers must train FO teams in accordance with (IAW) **FM 6-30, Tactics, Techniques, and Procedures for Observed Fire**, Chapter 4.
2. All members of the battalion fire support element (FSE) must know the proper *call for fire format* and the *six elements required* to properly initiate a voice fire mission.
3. FIST training should include radio rehearsals and the use of the training set forward observer (TSFO); emphasize proper call for fire formats.

4. Ensure soldiers understand the necessity of providing the fire direction center with accurate and proper information the first time to increase mission processing times and ensure faster rounds on target.

(TA 2.1.3 Prepare Order to Fire)

TREND 4: Howitzer range cards.

OBSERVATIONS:

1. Too many firing batteries either have no howitzer range card or only a partially completed one.
2. Frequently, howitzer range cards do not contain direct fire targets or data for anti-personnel ammunition (APERS) or the 155-mm Killer Junior.

Techniques:

1. Battery leadership should inspect howitzer range cards during pre-combat checks and inspections to ensure the range card is done to standard.
2. *Reinforce the value* of the direct fire range card for howitzer engagements.
3. Doctrinal reference: **FM 6-50, *Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery***, Chapter 3, pp. 3-12.

(TA 2.1.3 Prepare Order to Fire)

TREND 5: Out-of-traverse/6,400-mil missions. Firing units often experience difficulty executing out-of-traverse missions.

OBSERVATIONS:

1. Executive officers (XOs) too often fail to derive the minimum quadrant elevation (QE) for each octant.
2. Fire direction centers (FDCs) often fail to compute terrain gun position corrections (TGPCs) for each octant.
3. Often howitzer section equipment, such as the prime mover and/or camouflage netting, prohibits true 6,400-mil capability.
4. Howitzer sections routinely do not emplace their aiming posts correctly.
5. Lack of aiming reference points and pick-up displacement for all possible azimuths further inhibits crews from executing out-of-traverse/6,400-mil missions.
6. Gunners and section chiefs are not comfortable using aiming posts to pick up displacement.
7. Units are not using distant aiming points (DAPs) despite their availability.

RESULT: Slow fire mission response times, particularly when responding to counter fire.

Techniques:

1. Doctrinal references: **FM 6-40, *Tactics, Techniques, and Procedures for the Field Artillery Manual Cannon Gunnery***; **FM 6-50, *Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery***; and the appropriate howitzer -10.

2. Ensure the executive officer (XO) and fire direction center (FDC) understand the requirements necessary for the conduct of out-of-traverse missions, especially for setting up the chart in the FDC to facilitate 6,400-mil operations.

3. Ensure howitzer sections are trained on how to position their alternate aiming reference points and are completely proficient at picking up displacement.

4. Frequently rehearse out-of-traverse dry fire missions in each octant to ensure the firing unit is capable of providing fast, accurate fires.

5. Ensure all unit equipment is positioned to facilitate 6,400-mil operations.

(TA 2.1.3 Prepare Order to Fire)

TREND 6: Observer plans and use of triggers. Company fire support officers (FSOs) are not developing observer plans and trigger points during defensive operations.

OBSERVATION: Too many observers are unable to see the target area and do not establish or rehearse a trigger point.

RESULT: Planned fires normally impact after the target has passed through the target area, allowing an enemy element to successfully pass through the defensive sector.

Techniques:

1. Company FSOs must position observers to support the defense:

- In restrictive terrain, place the FO well forward of the company/team (CO/TM) defensive position.
- Establish an *identifiable* trigger point, based on a projected rate of enemy movement through the sector.
- Rehearse the optimal position of the FO relative to the trigger once the enemy enters the target area.

2. Read **FM 6-30, *Tactics, Techniques, and Procedures for Observed Fire***, page 5-25, on the establishment and use of triggers.

(TA 2.2 Engage Ground Targets)

TREND 7: Mortar employment in close contact. Few units are using mortars when contact with the enemy is established.

OBSERVATIONS:

1. Maneuver unit leaders (platoon and company) are allowing their forward observers and FSOs to fight with artillery fires prior to maneuvering on the enemy, rather than using the more responsive mortars under their direct control.

2. Company FSOs and platoon FOs are not establishing priority targets with 60-mm and 81-mm mortars along the unit's route.

Techniques:

1. FOs and FSOs should establish targets along the unit's route as they template enemy positions and likely ambush sites.

2. As the unit moves along the route, the FO should cancel one target and establish the next target. *Use the minimum safe distance of the weapon system* designated to signal the shift to a new target.

3. When the unit comes in contact with the enemy, the FO can initiate his priority target or shift from his priority target, placing his fires on or behind the enemy.

4. See "*Fast, Accurate Fires in the Close Fight*" in the **Combat Training Center (CTC) Quarterly Bulletin, 2d Qtr, FY 96, No. 96-4**, Mar 96.

(TA 2.2.1 Conduct Lethal Engagement)

TREND 8: Accuracy of mortars.

OBSERVATIONS:

1. Fire support officers (FSOs) are not providing timely meteorological (MET) data or coordinating for survey (declination) support for the task force's organic mortars.

2. Mortar platoons and sections are not aggressively conducting registrations as a means to improve their accuracy.

Techniques:

1. The battalion FSO should coordinate with the FA battalion S-3 to get meteorological (MET) messages (computer MET if the unit is using the mortar ballistic computer) and survey support. Include the maneuver task force in the field artillery (FA) battalion's priorities of survey support (with the priority going to the main effort task force).

2. The FSO, with the maneuver task force S-3, should establish which units should register the mortars and then ensure this tasking is included in the operations order.

(TA 2.2.1.1 Conduct Surface Attack)

TREND 9: Indirect fires during small unit contacts. Infantry platoon leaders and forward observers are reluctant to use indirect fires during small unit contacts.

OBSERVATIONS:

1. There is a tendency to be overly cautious for fear of fratricide, since the enemy is often only 200-300 meters away.

2. Most fire support teams do not have an established battle drill for this situation. They are not well trained in the adjustment of fires onto rapidly moving mounted and dismounted enemy.

3. Decentralized "fast" fire missions are rarely seen, particularly during the search and attack phase of operations.

RESULTS:

1. Reduced opportunity to kill the enemy.

2. Most units do not fire the required volume of ammunition in effect to achieve the desired effects on the target.

Techniques:

1. Plan for and *use* artillery and mortar fires to rapidly isolate, block, or defeat enemy forces upon contact.

2. Use priority targets for both mortars and artillery. Selectively use quick fire channels to assist the observer in obtaining "fast, accurate" fire missions.
3. Establish battle drills that immediately "get a round on the ground" upon contact. Once the round is on the ground, observers should be trained to make one bold, accurate shift and fire for effect.
4. Always give accurate target descriptions, and make sure that the attack guidance is fully understood.
5. FIST training: include engaging close-in targets with fire support while the observer is moving.
6. Train forward observers (FO) on rapidly determining a target location and initiating a complete call for fire while on the move *and under attack*.
7. Train FOs on the use of the Precision Lightweight GPS Receiver (PLGR) to rapidly determine a target location in restrictive terrain. See *"The PLGR: Techniques and Procedures Forward Observers Can Use to Bring Rapid, Accurate, Indirect Fires to the Close Fight," Combat Training Center (CTC) Quarterly Bulletin, 2d Qtr, No. 96-10, Oct 96.*

(TA 2.3 Integrate Fire Support)

TREND 10: Light Tactical Fire Direction System (LTACFIRE) operations.

OBSERVATIONS:

1. Although rotational units consistently maintain digital communications, they rarely exploit the capabilities of the LTACFIRE/initial fire support automation system (IFSAS).
2. Few units use the LTACFIRE/IFSAS to manage targets, conduct fire planning, and conduct tactical fire direction.

RESULTS:

1. The common results are fire plans that are not disseminated or fired, inefficient use of resources, and failure to meet the commander's attack criteria.
2. Inexperienced operators, along with failure of the chain of command to force the use of the LTACFIRE system, are the primary reasons. Although units often have excellent LTACFIRE SOPs, they are rarely used.
3. Digital fire control systems greatly facilitate and ease target management, fire planning, tactical fire direction, and the dissemination of information.

Techniques:

1. To exploit the LTACFIRE system, **both** operators and leaders must fully understand the capabilities of the system. Effective LTACFIRE/IFSAS sustainment training, using realistic and demanding operational scenarios, should be established and enforced to instill the necessary confidence to use the system.
2. Incorporate and enforce the use of LTACFIRE/IFSAS during all Home Station training events to ensure that this becomes the primary means of fire control and planning.

(TA 2.3 Integrate Fire Support)

TREND 11: Survey operations.

OBSERVATIONS:

1. Survey support is not maximizing the use of all assets.
2. Initial field artillery support plans have done a good job in directing survey support in order of priority to all assets requiring survey control. Unfortunately, the trend is for survey support to cease after the firing batteries and radar are complete.

RESULT: Units exert minimum effort or consideration to assets in the task force; i.e., 81-mm mortars, OH-58D, combat observation and laser team (COLT) targets, routes, and obstacles.

Techniques:

1. Ensure planning in the survey annex of the field artillery support plan encompasses all assets in the task force that require survey.
2. Review **FM 6-2, *Tactics, Techniques, and Procedures for Field Artillery Survey***, specifically Chapters 14-2, 14-7, 15, and figure 15-1 (Fire Support Coordination [FSCOORD] Checklist).
3. Conduct extensive officer and NCO professional development at Home Station, focusing on the importance of effective survey.

(TA 2.3 Integrate Fire Support)

AIR DEFENSE BOS

Positive Performance

TREND 1: Target engagement. Stinger and Avenger teams have consistently shown improvements in target engagement. Crews are spending time at the intermediate staging base (ISB) and at Home Station conducting drills IAW **FM 44-18, *Air Defense Employment: Stinger***. This includes making use of the moving target simulator and establishing battle roster teams.

(TA 3.1 *Process Air Targets*)

TREND 2: Air defense systems placement. Most air defense teams continue to position themselves properly along templated or known air avenues of approach. Monitoring the division early warning net and receiving data via hand-held terminal units (HTU) allow the teams to prepare for immediate action and execute the appropriate battle drill.

(TA 3.2.1.2.1 *Employ Air Defense Artillery*)

Needs Emphasis

TREND 1: Early warning and intelligence preparation of the battlefield (IPB) refinement.

OBSERVATIONS:

1. These activities continue to challenge units throughout rotations. Batteries have no pattern analysis systems in place to record and disseminate historical enemy flight information.
2. Early warning information is not used to refine the aerial portion of the IPB.

RESULTS:

1. Commanders are unable to accurately portray enemy air activity and be predictive in defeating future air activity.
2. The lack of IPB products creates difficulty in confirming enemy anti-aircraft artillery (AAA) and predictive analysis for future enemy air actions.
3. This, in turn, leads to poor positioning of air defense assets, particularly light and special division interim sensor (LSDIS) early warning teams.

Techniques:

1. Battery commanders must develop an aggressive sensor management plan to develop a picture of enemy air activity.
2. Battery leaders must use this data to refine their IPB products.
3. **FM 44-48, *Avenger Platoon, Section, and Squad Operations***, outlines sensor employment guidelines as well as technical capabilities and limitations to be considered in early warning planning.

4. Units must use their 14J operators in the planning process to maximize the employment of sensors. Effective use of the forward area air defense command, control, communications, and intelligence (FAADC3I) system allows units to gain situational awareness and facilitate battle-tracking.

(TA 3.1.1 Select Air Targets to Attack)

MOBILITY/SURVIVABILITY BOS & NUCLEAR/BIOLOGICAL/CHEMICAL (NBC)

Positive Performance

TREND 1: Trained teams. Downed aircraft repair/recovery teams are better trained on rigging aircraft for sling load and accomplishing battle damage assessments and repairs.

(TA 6.3.1 *Provide Battlespace Hazard Protection*)

TREND 2: Survivability. Careful management, planning and utilization of engineer resources, Class IV planning, and improved threat analysis and awareness have contributed to improved survivability.

(TA 6.3.1 *Provide Battlespace Hazard Protection*)

TREND 3: Plotting chemical attacks. Brigade and battalion NBC personnel continually display a firm understanding of the necessary skills required to plot chemical attacks. They possess a keen understanding of manuals such as **FM 3-3, *Chemical and Biological Contamination Avoidance***, and **FM 3-7, *NBC Field Handbook***.

(TA 6.3.2 *Employ Operations Security*)

TREND 4: Environmental issues. Units are demonstrating the capability to establish fueling and arming points quickly and effectively. When a FARP is established, units are placing emphasis on safety and environmental issues such as fuel spills and ammo protection. The FARP is vital to the success of any aviation mission, and establishing and operating a FARP quickly gives the aircraft more mission time and less refueling time.

(TA 6.3.2.2.1 *Employ Camouflage*)

TREND 5: Smoke operations at the platoon level. A majority of platoons effectively employ large area smoke to cover the target area. Troop-leading procedures are generally utilized, resulting in detailed planning and soldiers being informed on the current mission. References: **FM 3-50, *Smoke Operations***, and **FM 3-101-1, *Smoke Squad/Platoon Operations***.

(TA 6.3.2.2.3 *Employ Smoke/Obscurants*)

Needs Emphasis

TREND 1: Use of Air Volcano.

OBSERVATION: The successful employment of Air Volcano requires extensive planning and detailed guidance. Air crews and aviation battalion planners often fail to ensure they have all the information required for successful employment of this combat multiplier. Air Volcano requires centralized planning and decentralized execution.

RESULT: Aircrews do not make the decisions required to ensure a minefield is emplaced IAW the commander's intent.

Techniques:

1. A number of variables must be incorporated in mission planning:
 - The type of minefield to be emplaced must be defined to the aircrew.
 - The type of minefield affects such planning requirements as timelines, aircraft load, time on target, FARP planning, flight route (number of passes over target area), and even the ability to conduct the mission.
 - The air crew must know the type of minefield and the intent of each type of minefield to better meet the commander's intent in the event they cannot emplace the minefield exactly as planned once they are over a target area.
 - If a crew understands the differences between disrupt and fix versus turn and block minefields, and understands the commander's intent for the mission, it is more capable of making last-minute changes once on target to properly employ the minefield.
2. The aircrew must have a full understanding of the enemy situation and the commander's intent for the minefield. Armed with this information, the aircrew can identify whether they can conduct a deliberate dispensing or, if time and enemy are an issue, a hasty dispensing. Crews can also plan on the delivery technique, which often is tied to the commander's intent and the friendly situation. It is imperative that flight crews emplace the mines at the right location, and depending on the mine time settings (4hr, 48hr, 15day), the minefield must be emplaced at the right time. Based on these factors, the delivery techniques used may be critical to successful mission accomplishment.
3. Air Volcano crews should be trained and familiar with the different types of minefields which can be emplaced with Air Volcano. These types of minefields are defined in **FM 20-32, Mine/Countermine Operations** and **FM 1-113, Utility and Cargo Helicopter Operations**. Unit standing operating procedures (SOPs) for Air Volcano tend to be very thorough and identify all information required for Air Volcano missions; however, units must follow the guidelines outlined in their tactical standing operating procedures (TACSOPs).
4. Use of a command and control aircraft is recommended for Air Volcano missions. The synchronization of attack aviation, suppression of enemy air defense (SEAD), scatterable mine (SCATMINE) reports, and mission coordination can all be conducted through a command and control (C2) aircraft. A division engineer representative can also be located on the C2 aircraft to aid in last-minute coordination or expertise in the event the target layout is different or battlefield situations require changes to the planned minefield.

(TA 6.2.2.1 Emplace Mines)

TREND 2: Positioning of crew-served weapons.

OBSERVATIONS:

1. Batteries and platoons routinely do a poor job of identifying enemy capabilities and taking the necessary force protection measures to eliminate or counteract the threats of positioning crew-served weapons.
2. Units do a poor job of positioning crew-served weapons, placing them in positions that restrict movement and operation.

3. Too often the crew-served weapons positions lack interlocking fires.
4. Units fail to clear fields of fire.
5. Units select positions with little or no consideration about *dead space, enemy avenues of approach, difficulty in clearing fields of fire, and hill masses that block fields of fire*.
6. Too many soldiers do not understand how to fill out a range card.
7. Many soldiers do not know how the traverse and elevation mechanism functions on their weapons.
8. NCOs do not proactively supervise and train their soldiers on crew-served weapons.

RESULT: Batteries and platoons are often destroyed by a dismounted attack conducted by as few as three to five enemy soldiers.

Techniques:

1. Doctrinal references: **FM 6-50, *Tactics, Techniques, and Procedures for the Field Artillery Cannon Battery***, chapter 3; and **STP 6-13B14-SM-TG**, pg. 3-6.
2. Ensure all soldiers and leaders are trained on crew-served weapons emplacement, range card construction, clearing fields of fire and, most importantly, positioning crew-served weapons to maximize effectiveness given the constraints of the terrain.
3. Consider identifying crew-served weapon positions prior to the howitzer positions. This technique can greatly facilitate battery defense without affecting the battery's occupation.
4. Crew-served weapon positions should be inspected/checked by a senior leader battle commander (BC) or ISG to ensure the weapon is being used effectively. This check should be conducted by actually getting behind the weapon and ensuring it is set up correctly.

(TA 6.3.1 Provide Battlespace Hazard Protection)

TREND 3: Battlefield framework.

OBSERVATION: Battalions continue to have difficulty developing a battlefield framework within which to conduct movement-to-contact operations.

RESULT: Most plans focus on the close fight (killing the enemy today), but allocate insufficient efforts on reconnaissance and security (finding the enemy for tomorrow's fight), and the rear fight (shielding the force to sustain the fight).

Technique: Commanders and staffs should address the complete battlefield framework when developing courses of action as suggested in both **FM 100-5, *Operations***, and **FM 7-20, *The Infantry Battalion***.

(TA 6.3.1 Provide Battlespace Hazard Protection)

TREND 4: Breaching of mined/wire obstacle.

OBSERVATIONS:

1. Units consistently fail to track and disseminate intelligence on known and suspected enemy minefields, resulting in frequent losses to enemy mines and even repetitive minestrikes in the same minefield.

2. During the conduct of a breach, units routinely require attached engineers to establish their own suppression and obscuration at the breach point, and then require the engineers to secure and reduce the obstacle themselves (i.e., suppress, obscure, secure and reduce [SOSR] are left up to the engineers). This is a problem, as the typical engineer unit has a limited night-fighting capability compared with that of the infantry (engineers have fewer NVGs, no PVS-4 on M249, no PAQ-4s).

RESULT: These actions result in a much slower breach and many unnecessary casualties.

Techniques:

1. Use infantry to fight to the breach site (if necessary) and effectively suppress and obscure the site before committing the engineers. This allows the engineers the ability to focus on the actual breach of the obstacle with bangalore, other demolitions, or an alternate technique.
2. If the enemy can place effective direct fire on a unit's breach site, then the unit is not suppressing and/or obscuring adequately. If this is occurring, a unit must take the time necessary to suppress those fires before sending soldiers up to the breach point again.
3. Despite success in predicting minefield locations, leaders and drivers lack awareness of mines and do not know which routes are clear and which are not. Part of the solution lies in the TOC and the employment of effective battle-tracking techniques as outlined in **CALL Newsletter No. 95-7, Tactical Operations Center (TOC)**, May 97.
4. The rest of the solution lies in dissemination. When operating in a minefield-rich environment, all vehicles should travel with a minefield and route overlay, and battalions should establish procedures for the routine dissemination of overlay updates.

(TA 6.3.1.1 Protect Individuals and Systems)

TREND 5: Route clearance and sustainment.

OBSERVATIONS:

1. Too many units fail to execute a sustained route clearance plan.
2. Units often do not commit maneuver forces to destroy the enemy forces overwatching minefields.

RESULTS:

1. Failure to execute a route clearance hampers logistics, delays casualty evacuation, and often prevents the commander from being able to circulate the battlefield to increase his situational awareness.
2. Enemy forces regularly reseed minefields that are detected and cleared by friendly units and then ignored.

Technique: A discussion of route clearance and sustainment techniques can be found in two articles found in the Center for Army Lessons Learned (**CALL**) *News From the Front!* Mar-Apr 98 issue: "*Reducing the Cost of Reducing Obstacles*" and "*I Could Have Been a Contender.*"

(TA 6.3.1.1 Protect Individuals and Systems)

TREND 6: Reaction to nuclear, biological, and chemical (NBC) threats.

OBSERVATIONS:

1. Most units lack a well-thought-out NBC plan.
2. A common problem is the lack of basic NBC knowledge and a plan that delineates actions to take on and after the attack (to include unmasking procedures).

RESULT: Too many units suffer NBC-related casualties because of improper actions on NBC contact.

Technique: **FM 3-4, *NBC Protection***, provides information on NBC protection. Even though other field manuals provide a wealth of information on NBC, Chapters 2 and 3 of FM 3-4 provide outstanding basic information to help thought and planning processes.

(TA 6.3.1.1 *Protect Individuals and Systems*)

TREND 7: Force protection.

OBSERVATION: Too many medical units continue to underestimate the importance of force protection, especially from indirect and direct fires.

RESULT: The forward support medical evacuation (MEDEVAC) teams forward support maintenance teams (FSMTs) fail to construct survivability and fighting positions to standard. When attempted, most neglect the task altogether.

Technique: Units should review **FM 7-8, *Infantry Rifle Platoon and Squad***, page 2-86; **STP 21-1; and SMCT, *Soldiers Manual for Common Tasks***, (tasks No. 071-331-2025, No. 551-721-1352, No. 051-191-1501, No. 031-503-1004).

(TA 6.3.1.1 *Protect Individuals and Systems*)

TREND 8: Survivability operations.

OBSERVATIONS:

1. Individual soldiers do not know the standards for individual and crew-served weapon fighting positions. These positions are almost always substandard and frequently dangerous to the soldiers that occupy them.
2. Leaders are not familiar with collective survivability and force protection requirements outlined in **FM 5-103, *Survivability***, and the force protection planning process described in **FM 5-114, *Engineer Operations Other Than War***, and **Joint Publication 3-10.1, *Joint Tactics, Techniques and Procedures for Base Defense***.
3. Frequently, units do not construct viable survivability positions for critical systems such as artillery batteries, counterfire radars, tactical operations centers (TOCs), signal nodes, aviation assembly areas, and ammunition transfer points, leaving them vulnerable to ground and air attack.

RESULTS:

1. Cursory berming, rather than digging, is the norm.
2. Camouflage measures are rarely used outside immediate tactical operations center (TOC) areas.

Technique: Train leaders and soldiers on survivability standards in accordance with **FM 5-103, *Survivability***.

(TA 6.3.1.1 *Protect Individuals and Systems*)

TREND 9: Force protection and perimeter defense. Protecting the force is every leader's concern and essential to sustaining the force.

OBSERVATIONS:

1. Aviation maintenance units training at the JRTC are very weak in the skills needed for force protection. Most unit personnel do not know how to construct fighting positions or put up triple standard concertina wire to standard.
2. Individual and crew-served weapons positions are not completed to standard, often lacking overhead cover.
3. The use of obstacles is non-existent.
4. Camouflage of personnel, tents, vehicles, and equipment are seldom to standard.
5. The improvement of assembly areas fails to occur after initial occupation.

Techniques:

1. All leaders and soldiers should review **FM 7-8, *The Infantry Rifle Platoon and Squad***, and **FM 5-103, *Survivability***, for techniques and standards for defensive measures.
2. **FM 20-3, *Camouflage***, gives leaders information about camouflage principles.
3. Develop an assembly area plan and then continually improve force protection measures.
4. Constructing survivability positions for all soldiers enhances combat survivability.
5. Leaders must ensure that force protection is a priority and that the aviation task force is included in the brigade task force defensive plan.

(TA 6.3.1.1 *Protect Individuals and Systems*)

TREND 10: Common skills.

OBSERVATION: A large percentage of soldiers in medical units do not know the common skills expected of every soldier. There is a tendency to teach the few tasks that will be tested in a fiscal year and leave the remainder of the tasks untrained.

RESULT: Soldiers do not understand how to construct fighting positions, where to place fighting positions for effective fire, how to report incidents and events, how to scan areas for which they are responsible, or how to move through areas without being exposed.

Technique: Most of the skills necessary for survival on the battlefield are contained in **STP 21-1, *Soldier's Manual of Common Tasks Skill Level I (SMCT)***. NCOs and soldiers need to train those basic skills to standard and then work to sustain proficiency.

(TA 6.3.1.1 *Protect Individuals and Systems*)

TREND 11: Force protection and basic soldier skills.

OBSERVATIONS:

1. Soldiers do not always apply basic combat skills (e.g., vehicle dispersion, camouflage, cover and concealment, security at halts).
2. Many soldiers do not know how to properly use the mine detector or the M2, .50-cal machinegun.

RESULTS:

1. While conducting mounted patrols, MPs follow each other too closely and fail to dismount to provide security at halts.
2. While moving mounted and dismounted and at halts, soldiers do not seek cover and concealment quickly enough to avoid detection and injury.
3. Soldiers do not harden vehicles, sandbag turrets, or dig fighting positions with appropriate overhead cover.
4. Leaders do not employ the platoon mine detector with squads on route reconnaissance missions.
5. Soldiers need more NBC training across the entire spectrum of operations.

Techniques:

1. Leaders and soldiers should review, apply, and teach the techniques outlined in **FM 21-75, *Combat Skills of the Individual Soldier***; **FM 19-4, *Military Police Battlefield Circulation, Area Security, and Enemy Prisoner of War Operations***; **ARTEP, 19-100-10-DRILL, *Military Police Drills***; and **STP 21-1-SMCT, *Soldiers Manual of Common Tasks*** (tasks No. 071-326-0513, No. 071-326-0502, No. 071-326-5703).
2. Leaders must reinforce the importance of force protection and incorporate these measures, as well as NBC, into training scenarios that require leaders and soldiers to react to challenging, complex situations. Leaders must also continue to train and equip squad combat lifesavers.

(TA 6.3.1.1 *Protect Individuals and Systems*)

TREND 12: Fighting positions.

OBSERVATION: Signal soldiers on retransmit (RXMT) teams are digging substandard fighting positions.

RESULT: Due to poor construction, fighting positions do not offer the protection from direct and indirect fires and are frequently dangerous to the soldiers that occupy them.

Technique: Soldiers must review graphic training aid **GTA 7-6-1, *Fighting Position Construction***.

(TA 6.3.1.1 *Protect Individuals and Systems*)

TREND 13: Perimeter defense.

OBSERVATION: Medical unit perimeter defense shows significant improvement. However, several shortcomings still impact the unit's ability to defend against level one threats.

RESULTS:

1. Soldiers do not know how to construct hasty or deliberate fighting positions.
2. Leaders do not look at terrain to locate fighting positions at strategic points to provide interlocking fires covering the entire perimeter.
3. Obstacles are not covered by fire.
4. Perimeter lighting is often used but not clearly integrated into the defense.

Techniques:

1. Units should train and review **FM 7-8, *Infantry Rifle Platoon and Squad***, page 2-86.
2. Review **STP 21-1, *Soldier's Manual of Common Tasks Skill Level I (SMCT)*** (tasks No. 071-331-2025, No. 551-721-1352, No. 051-191-1501, No. 031-503-1004).

(TA 6.3.1.1 *Protect Individuals and Systems*)

TREND 14: Route clearance and mine awareness. Despite some success in predicting minefield locations, units continue to suffer considerable loss due to enemy mines.

OBSERVATIONS:

1. There is a lack of minefield awareness among leaders and drivers (many vehicles are lost in minefields that have been marked by earlier units).
2. There is a lack of proficiency in clearing minefields and a general lack of reaction when minefields are reported to the tactical operations center (TOC). Despite an enemy who very predictably caches mines within 300 meters of his minefields and overwatches with infantry, few units see a minefield as an indicator of enemy activity.

RESULTS:

1. Units do not include minefield locations into their targeting process or commit maneuver forces based on the presence of mines.
2. Enemy forces regularly reseed minefields that are detected and cleared by friendly units and then ignored. In some cases, this scenario persists for a period of days and results in multiple mine strikes and casualties.

Technique: Commanders should exercise tactical patience during route clearance operations and allow engineer leaders to analyze the situation to facilitate route clearance.

(TA 6.3.2 *Employ Operations Security*)

TREND 15: Reconnaissance and security.

OBSERVATION: Units fail to protect the force through aggressive reconnaissance and security patrolling during defensive preparation and patrol base activities. Only a small percentage of the force (if any at all) is dedicated to security operations.

RESULTS:

1. There is little analysis of terrain using observation and fields of fire, concealment and cover, obstacles, key terrain, and avenues of approach (OCOKA). The threat goes into where to position security elements.
2. Listening posts/observation posts (LP/OPs) are normally positioned too close to friendly elements to provide adequate early warning.
3. Enemy stay-behind elements are able to provide overwatch of obstacles, fighting positions, and other high-value targets with little fear of compromise.

Techniques:

1. Security operations are outlined in **FM 7-10, *The Infantry Rifle Company***, pp. 2-19 to 2-22 and 5-12 to 5-14. The techniques must be applied and rigidly enforced.
2. The first priority of work is **SECURITY!**

(TA 6.3.2 *Employ Operations*

Security)

COMBAT SERVICE SUPPORT BOS

Positive Performance

TREND 1: Military occupational speciality (MOS) skills. Soldiers display exceptional knowledge in military occupational speciality (MOS) skills and are extremely proficient in aircraft repairs.

(TA 7.3.2 Fix/Maintain Equipment)

TREND 2: Unscheduled maintenance. The response time for completing unscheduled maintenance on aircraft has been very good. This is due to the strong skills of the individual crew chiefs. Maintenance supervisors have taken the time to coach and teach new mechanics on proper maintenance procedures. The supervisor's presence and assistance have ensured quality maintenance performed correctly the first time. The subsequent aircraft availability rates have been a significant factor in unit training opportunities at the JRTC.

(TA 7.3.2 Fix/Maintain Equipment)

TREND 3: Aircraft operational readiness. The aircraft readiness rate is being maintained well above 90% during rotations at the JRTC. This is due to the technical and tactical proficiency of the crew chiefs, maintenance personnel, and maintenance test pilots, and their determination for mission success. Commanders should continue to emphasize the importance of maintaining combat equipment in the highest readiness posture at Home Station to ensure aviation units are ready to accomplish all assigned missions. Assigning crew chiefs to specific aircraft and requiring these crew chiefs to be on site during all maintenance ensures familiarity with aircraft problems and often reduces troubleshooting and delays.

(TA 7.3.2 Fix/Maintain Equipment)

TREND 4: Basic first aid and evacuation. Casualty evacuation (CASEVAC) operations continue to be a positive trend, in part because of emphasis on certified combat lifesavers at the squad and team level. In addition, platoons traditionally bring their highly skilled medics.

(TA 7.4.4.1 Provide Medical Treatment)

TREND 5: Casualty evacuation (CASEVAC) operations at company level. CASEVAC at the company level continues to be a strength and shows the impact of Home Station training. Platoons and companies normally do an excellent job treating and evacuating casualties as far forward as the company casualty collection points (CCP). They are also well versed in requesting aerial MEDEVAC aircraft and establishing helicopter landing zones (HLZs) for extraction of casualties.

(TA 7.4.4.2 Evacuate Casualties)

TREND 6: Vehicle maintenance and sustainment operations. Sustainment operations are a positive trend at the JRTC. This sustainment begins with the initial coordination before deployment and continues through the actual operational sustainment during the rotation. The platoon sergeant shoulders the bulk of the sustainment operation to include all classes of supply and personnel. Unit success can be attributed to the platoon sergeant's knowledge of the supply system and rapport with the supported brigade.

(TA 7.5.2 Supply the Force)

Needs Emphasis

TREND 1: Evacuation planning.

OBSERVATION: The forward support MEDEVAC team (FSMT) leader needs to develop a better working relationship with the forward support medical company (FSMC) commander, brigade S-1, brigade surgeon, and the aviation task force.

Techniques:

1. This relationship should be fostered at Home Station and exercised during redeployment field training exercises (FTXs).
2. It is the FSMT leader's job to understand the capabilities and proper implementation of aeromedical assets on the battlefield.
3. Casualty evacuation (CASEVAC) operations need to be preplanned combat missions, supplementing medical evacuation (MEDEVAC) for continuous evacuation of the battlefield.

(TA 7.4.4.2 Evacuate Casualties)

TREND 2: Medical unit application of doctrine and tactics, techniques, and procedures (TTPs).

OBSERVATIONS:

1. The medical task force staff and subordinate leaders often cannot define or describe military terms used routinely in the fight. For example, medical units often do not understand the significance of task organization changes when defined in terms of assigned, attached, operational control (OPCON), and tactical control (TACON).
2. These terms provide critical command and control relationships that give commanders both specified and implied requirements in relation to those units.

RESULTS:

1. Information is often garbled in its translation. The lack of understanding in terminology and tactics results in unclear or incorrect interpretation of operations orders.
2. Seldom do medical units use backbrief methods to ensure subordinate leaders understand the message that was conveyed.

Technique: The backbrief clarifies instructions to reduce confusion and increase clarity. Leaders must understand that words mean different things to different people based on background, experience, and setting. For example, the term "secure the building" has entirely different meanings to a policeman or to an infantry officer.

(TA 7.4.5 Train Tactical Units and Personnel)

TREND 3: Enemy prisoner of war operations.

OBSERVATIONS:

1. Doctrinally, Military Police (MP) are responsible for the proper handling, processing, safeguarding, and reporting of all enemy prisoner of war/civilian internees (EPW/CI). Due to limited MP assets, the brigades, at times, do not require the MP platoon to conduct EPW/CI operations.
2. The brigades do not maintain and forward the required forms (DD Form 629, Receipt of Prisoner or Detained Person; DA Form 4137, Evidence/Property Custody Document; and DA Form 5976, Enemy Prisoner of War Capture Tag or local equivalent) for EPW/CI accountability.

RESULTS:

1. The MP company performs the mission assisted by the forward support battalion (FSB), and the brigade fails to provide the division with the required information, logs, and status reports on EPW/CI.
2. Proper controls and accountability for EPW/CI are not followed.

Techniques:

1. Military Police must be involved in EPW/CI operations. If there are other operational requirements for the MP platoon, it is advisable to require at least MP supervision/guidance over the processing and reporting of EPW/CI operations.
2. The platoon should enforce the guidelines for processing EPW/CI IAW the company and division TACSOP. References: **FM 19-4, Military Police Battlefield Circulation Control, Area Security, Enemy Prisoner of War**; and **STP 19-95B1-SM** (task No.191-376-4101).

(TA 7.7.1 Perform PW Operations)

TREND 4: Civilians on the battlefield (COB).

OBSERVATIONS:

1. Most units are unfamiliar or untrained in dealing with civilians on the battlefield. Problems range from the unnecessary use or display of force to permitting civilians free access to the position area and allowing them to disrupt unit activities.
2. Another common occurrence is for the unit to call battalion for guidance whenever civilians appear at the perimeter. Frequently, the battalion takes an inordinate amount of time to decide what it wants the unit to do with civilians.

RESULTS:

1. These actions unnecessarily anger friendly/neutral civilians and allow neutral/anti-U.S. civilians a significant opportunity to collect valuable intelligence (where the command and control (C2) nodes are, possible targets for terrorist activities, etc.).
2. Frequently, terrorists will gain unobstructed access to a battery and will destroy the battalion operations center (BOC)/fire direction control (FDC) or howitzer section through the detonation of a ruck sack or car bomb.

Techniques:

1. Develop and disseminate to the lowest level a "white/gray/black" list of all pro/neutral/anti-civilians and clear, concise guidance of what actions are to be taken with each type of civilian, as well as civilians not on any list.
2. Establish clear procedures on what soldiers are to do upon contact with civilians; train and rehearse soldiers on how to deal with COB at Home Station.

(TA 7.9 Evacuate Noncombatants from Area)

COMMAND AND CONTROL BOS

Positive Performance

TREND 1: Evacuation Liaison Team (ELT). A liaison package accompanying the forward support MEDEVAC team (FSMT) continues to be a success in solving the command, control, and communications (C3) problems that normally hinder the FSMT. The ELT provides the personnel and communications equipment necessary to establish proper control and liaison for the FSMT. The ELT is capable of coordinating all ground and nonstandard air evacuation casualty evacuation (CASEVAC) for the brigade. The ELT provides the ability to have medical evacuation (MEDEVAC) representation at key planning and rehearsal meetings. The single most important contribution of the ELT has been its ability to establish and maintain a dedicated casualty evacuation control network.

(TA 4.1.2 Manage Means of Communicating Information)

TREND 2: Lines of communication. Most brigades have recognized that control of ground lines of communication is critical to success in low- to mid-intensity operations. They understand the importance of conducting thorough intelligence preparation of the battlefield (IPB), fire support planning, and casualty evacuation planning when conducting route clearance operations. Many brigades are successful in task organizing for combined arms route clearance and convoy escort operations in accordance with **FM 5-7-30, *Brigade Engineer and Engineer Company Combat Operations***.

(TA 4.1.2 Manage Means of Communicating Information)

TREND 3: Install, operate, and maintain mobile subscriber equipment (MSE) systems. MSE teams have consistently demonstrated proficiency in installing/operating/maintaining MSE systems node center (NC), small extension node (SEN), line of sight, (LOS), robotic area vehicle (RAV), systems control system (SCC-2), and contingency communications control center parent switch (CCPS). Teams are spending time at the intermediate staging base (ISB) and Home Station conducting drills IAW prescribed training manuals and **ARTEP 11-067-30-MTP**. Many units have developed policies and procedures for the standardization of MSE drills; V Corps Pam 11-30 is a prime example.

(TA 4.1.2 Manage Means of Communicating Information)

TREND 4: Mission analysis. Mission analysis continues to be a strength of aviation task force staffs at the JRTC. All seventeen steps are generally covered, with the strongest steps being the mission analysis brief and the issuance of the commander's guidance.

(TA 4.2.1.1 Analyze Mission)

TREND 5: Parallel planning process. Many battalion S-3s have realized the importance of the parallel planning process when conducting the Military Decision-Making Process (MDMP). It is not uncommon to see S-3s at the brigade level participating with the liaison officer (LNO) in the brigade planning process while developing the foundation for the battalion plan. This parallel planning usually results in the issuance of Warning Order No. 1 after brigade course of action (COA) approval and Warning Order No. 2 (during the brigade orders reproduction). The ability to issue two or three warning orders during the brigade MDMP gives the battalions the necessary lead time to continue on with the remaining five (of seven) steps of the MDMP. Commanders and S-3s should not overextend their parallel planning efforts. As a general rule, they should never get ahead of the next higher headquarters in the planning process.

(TA 4.3 Determine Actions)

TREND 6: Improved liaison operations. Heavy team liaison officers (LNOs) are deploying with adequate personnel and equipment to conduct 24-hour operations. Heavy team LNOs are integrated into the brigade staff and performing duty as subject matter experts/special staff officers during the MDMP.

(TA 4.3 Determine Actions)

TREND 7: Aviation unit tactical (TAC) standing operating procedures (SOPs). Units are using good, well-thought-out SOPs to brief their missions. They have good checklist formats for covering the essential information necessary to cover mission essential task lists (METL). Areas that are covered include: communications card format, weapons loads, aircraft survivability equipment (ASE) settings, instrument meteorological conditions (IMC), and breakup procedures.

(TA 4.4 Direct and Lead Subordinate Forces)

TREND 8: Motivation and flexibility of military police (MP) platoons. The majority of the MP platoons possess a positive attitude and a desire to learn. They practice new tactics, techniques, and procedures (TTP), as well as develop new platoon standing operating procedures (SOP). Without exception, MP platoons demonstrate an incredible amount of flexibility and ability in accomplishing their missions.

(TA 4.4 Direct and Lead Subordinate Forces)

TREND 9: Firing battery movement order. The use of the movement order by the battery leadership should emphasize *specific and implied tasks* as well as movement routes utilizing start points, checkpoints, and release points. When higher headquarters do not issue start points, checkpoints, and release points, the battery leadership identifies their own, facilitating movement command and control.

(TA 4.4 Direct and Lead Subordinate Forces)

TREND 10: Verbal orders. The issuance of verbal warning orders and fragmentary orders (FRAGO) prior to the actual distribution of paper copies has allowed the subordinate units to begin parallel planning early in the brigade's planning cycle.

(TA 4.4.1 Prepare Plans or Orders)

TREND 11: Combat service support (CSS) synchronization meeting. The brigade S-4 and the forward support battalion (FSB) support operations officer are doing a good job at planning and executing the combat service support (CSS) synchronization meetings. These meetings are critical to the efficiency and effectiveness of the brigade's logistical posture. Meetings are most productive when an agenda is both published and adhered to, and when all brigade support area (BSA) tenants are present and actively participating. Additionally, it is helpful when products are developed or updated as a result of the meeting. The products that should be generated are a revised CSS synchronization matrix, an air movement table, and a FRAGO outlining tasks to subordinate units.

(TA 4.4.1 Prepare Plans or Orders)

TREND 12: Prepare for combat. Most units are strong at developing/communicating a plan and giving subordinates enough time to develop supporting plans (adherence to 1/3-2/3 rule). Leaders have also been assigning a task and purpose to each subordinate element. Also, many units have conducted adequate rehearsals.

Techniques:

1. As part of the warning order, leaders should give subordinate units an idea (preferably a task) of the specific mission that they will conduct. This allows subordinates to wisely use available time by conducting parallel planning and generic rehearsals.
2. A good technique is to conduct a rehearsal with team and/or squad leaders prior to conducting a full-force rehearsal. This allows the team/squad leader to brief his soldiers during conduct of the rehearsal and to make necessary adjustments to the plan.
3. If time permits, a full-force walk-thru in a small, open area is beneficial as it allows each soldier to see "the big picture" of what other elements are doing prior to the final rehearsal. Ideally, the final rehearsal should be conducted exactly as the unit will execute the mission: on similar terrain, using actual intervals between personnel and units. Remember that the first step to a good rehearsal is adequate planning and site selection.

(TA 4.4.1 Prepare Plans or Orders)

TREND 13: Company-level briefings/execution. The company-level briefings to aircrews prior to air assaults are strong and often provide the necessary details that were lacking in the brigade and battalion run air mission briefs (AMB). Air assaults are complex missions that require detailed planning and precise execution. The aircrews' proficiency in executing air assaults is evident by the number of successful missions seen at the JRTC. Units often are forced to execute air assaults with limited information and constrained timelines. Despite these hindrances, they are still able to successfully execute.

(TA 4.4.1.1 Develop and Complete Plans or Orders)

TREND 14: Production of an NBC annex for brigade orders. This trend continues to improve over the last quarter. Brigade chemical cells continue to produce sound NBC annexes where there once were none. NBC annexes are key to ensuring the sound integration of NBC assets and to synchronizing the brigade and battalion NBC fights. **FM 3-7, NBC Field Handbook**, is a good reference; many successful units are using it as a basis for their NBC annexes.

(TA 4.4.1.1 Develop and Complete Plans or Orders)

TREND 15: Combat service support (CSS) rehearsal. A well-defined agenda and attendance by the combat service support (CSS) planners from slice elements, battalion S-1s and S-4s, the brigade S-2, S-3, XO, and forward support battalion (FSB) support operations officer, fully synchronizes the CSS battlefield operating systems (BOS). The rehearsal is not a wargaming session. A reduced force rehearsal which concentrates on the concepts of support before, during, and after operations is essential. The service support annex and its appendices are used during the rehearsal. As a result of the rehearsal, a refined CSS execution matrix and overlay is produced and disseminated. Reference is **CALL Newsletter No. 91-1, Rehearsals**, Apr 91.

(TA 4.4.1.1 Develop and Complete Plans or Orders)

TREND 16: Planning to move tactically. Many leaders are conducting adequate planning for movement. This includes specifying movement formations, techniques, planning control measures (phase lines, checkpoints, etc.), and placement of key weapons and leaders in the formation.

Techniques:

1. Leaders must remember to plan their movement techniques and formations based on a detailed intelligence preparation of the battlefield (IPB) (which includes terrain/weather analysis) and adjust as necessary during execution.
2. Good planning of movement results in smoother execution and fewer changes after crossing the line of departure (LD).
3. Leaders must continue to reinforce muzzle awareness to all soldiers during training.

(TA 4.4.1.1 Develop and Complete Plans or Orders)

TREND 17: Rules of engagement (ROE) training. Brigade trial counsel is normally training unit personnel on mission specific ROE at Home Station and retraining them at the intermediate staging base (ISB). The brigade trial counsel is also training slice elements that link up with the brigade task force at the ISB.

(TA 4.4.4 Maintain Unit Discipline)

Needs Emphasis

TREND 1: Use of the chemical officer.

OBSERVATIONS:

1. In an abundance of rotational units at both brigade and battalion level, the chemical officer is used as a battle captain and the NCO is used as a tactical operations center (TOC) NCO or radio telephone operator (RTO) (or a combination of other duties above his NBC duties).

2. In the initial phase of operations, this is acceptable, but as the NBC threat escalates, a transition must occur. Chemical personnel must be allowed to execute their duties as the brigade or battalion's NBC expert. Calling chemical personnel after an attack is too late.

RESULT: Chemical personnel are not allowed the time that other battle staff members have been allowed to plan, coordinate, integrate, and synchronize the NBC effort.

Technique: FM 100-5, *Operations*, and FM 3-100, *NBC Defense, Chemical Warfare, Smoke and Flame Operations*, outline the duties and processes that chemical personnel must accomplish.

(TA 4.1 Acquire and Communicate Information and Maintain Status)

TREND 2: Internal communications.

OBSERVATIONS:

1. Internal communications means getting the right information to the right people in a timely manner within the organization using the most efficient and effective means of transmission. Typically, units bring a multitude of hand-held radios for leaders. While information can be relayed quickly to many people at remote locations, units tend to rely heavily on radios as their primary means of internal communications.
2. Hand-held radios are normally non-secure. Inexpensive scanners available at Radio Shack provide a simple method of compromising information passed by this type of radio.
3. Units assume that information passed as a net call is received by everyone holding a radio.
4. Units seldom exercise the chain of command to disseminate information to the lowest level.

RESULTS:

1. Critical information is held in pockets within the organization, assuming it has been dispersed throughout the unit. Simple questions such as "What country are you in?," "Who are you fighting?," and "What does the enemy's uniforms look like?" are often met with blank stares.
2. While hand-held radios have their place, units must not make grand assumptions about their usefulness within a compound.

Techniques:

1. Internal communications must be facilitated by the entire chain of command.
2. Practice using all available mediums of internal communications at Home Station.
3. Develop means of feedback to ensure communications are understood. For example, backbriefs can be an excellent feedback mechanism for ensuring orders are understood.
4. Avoid using non-secure means of communication.

(TA 4.1 Acquire and Communicate Information and Maintain Status)

TREND 3: Air assault planning and use of timelines.

OBSERVATION: In the air assault unit planning process, the timelines sometimes show a lack of connectivity to key events.

RESULT: Some members of the battalion staff do not understand that connectivity of key events to the timeline is important to the overall success of the plan. These battle staff officers find themselves behind key events and unable to catch up, resulting in poor execution of the operations order due to poor synchronization.

Technique: The battalion battle staffs need to train in synchronizing key events to a timeline established for planning. Practice at Home Station will help train staff officers on the need to stay on task and to maintain the timeline. This training will also facilitate establishing a battalion and eventually a brigade battle rhythm.

(TA 4.1.1 Prepare Plans or Orders)

TREND 4: Casualty evacuation control net.

OBSERVATION: Neither the forward support medical company (FSMC) command post (CP) or the aviation task force tactical operations center (TOC) has been able to do a sufficient job of establishing and maintaining a dedicated casualty evacuation control net.

Technique: Units must utilize the evacuation liaison team (ELT) concept in establishing a dedicated casualty evacuation control network.

(TA 4.1.1 Prepare Plans or Orders)

TREND 5: Mobile subscriber radio telephone (MSRT) operations.

OBSERVATIONS:

1. MSRTs continue to experience significant outages at the JRTC.
2. Mobile subscriber equipment (MSE) network planners generally cover the area occupied by subscribers with wireless radio access unit (RAU) access to the area common user system (ACUS). MSRT operators are poorly trained to operate/troubleshoot their equipment.

RESULT: Procedures such as MSRT/KY-68 over-the-air-rekeying (OTAR), and FAXing (UXC-7A) from an MSRT to a digital non-secure voice terminal (DNVT) are beyond most owner-operator capabilities.

Techniques:

1. Establish operator certification programs and a monthly MSRT communications exercise (COMMEX) at Home Station.
2. Use a locally produced, pocket-sized, ready reference (complete with remoting instructions and a troubleshooting chart) for every MSRT operator.

3. A successful COMMEEX of MSRTs in the intermediate staging base (ISB) (manual upload of the frequency plan in support of this COMMEEX) is highly encouraged.
4. Staff planning/coordination by the brigade signal officer and MSE company commander for support to MSRT subscribers once they enter the maneuver area.
5. Planning should include the disposition/location of communications and electronics (C&E) maintenance personnel, priority of each KY-68 and RT-1539 (P)A(C)/G in the combat team (to include those at the RAU's), and assigning an individual for tracking MSRT status.
6. Refer to **FM 11-43, *The Signal Leader's Guide***, and **FM 11-30, *MSE Communications in the Corps/Division***, for further information.

(TA 4.1.2 Manage Means of Communicating Information)

TREND 6: NBC warning and reporting.

OBSERVATION: Warning and reporting systems in rotational units is dysfunctional. During chemical attacks it takes one or more hours to receive the initial NBC report with any useable information.

RESULT: Chemical personnel often delay taking any action until the initial report is received.

Techniques:

1. The key is, "Don't delay." If the chemical officer has conducted a thorough intelligence preparation of the battlefield (IPB) and a strike has occurred in a templated area, he can then start taking action in response to the attack.
2. A good tool that assists the tactical operations center (TOCs) and chemical personnel in dealing with chemical attacks is the "battle drill." This provides focus for everyone in the TOC and causes a pre-selected number of actions to be executed.
3. One condition of the battle drill is the submission of an NBC 1 report to higher headquarters. The NBC 1 report will provide the chemical officer with the necessary information to identify the hazard that confronts him.
4. **FM 3-7, *NBC Field Handbook***, and **FM 3-3, *Chemical and Biological Contamination Avoidance***, address the required information for a good NBC 1 report.

(TA 4.1.2 Manage Means of Communicating Information)

TREND 7: Medical unit communications with support elements. The transmission of information throughout an organization is a significant challenge to medical units at JRTC.

OBSERVATIONS:

1. Typically, echelon above division (EAD) medical units coordinate with the supported brigade during initial planning and while the unit is in the intermediate staging base (ISB). However, once deployed into the maneuver area, little communication takes place between division and corps-level troops.

2. Hardware incompatibilities between units often hinder communications. Medical units still operate on 12-series radios, while combat forces use frequency-hopping equipment. Medical units typically have insufficient communications assets to monitor the number of frequencies required to maintain good communications with adjacent and higher headquarters.

3. Units fail to share information or include supporting elements in the planning process. Seldom do corps-level units follow-up with the maneuver brigade in terms of battle-tracking once the brigade departs the ISB.

4. Because of the non-secure lines of communications (LOCs), operational tempo (OPTEMPO) of the exercise, and difficulty in obtaining and maintaining clear communications, units put communications with adjacent and supported units in the "too hard to do" category and assume the missions are going as planned in the initial meetings.

RESULTS:

1. This shortfall results in poor planning for support, inefficient use of assets across the battlefield, and high died-of-wounds rates.

2. Consequently, requirements change without the knowledge of those that must support the mission.

3. Corps units are unaware of threats such as minefields, enemy locations, and assets that will significantly disrupt the unit's ability to support the maneuver force.

Techniques:

1. Units must continually and consistently communicate with supported units. Without battle-tracking and good continuous communication with the supported units, support cannot be planned or provided efficiently.

2. If hardware systems are incompatible, some method must be found to consistently share information between units. If all else fails, the myriad of vehicles (air and ground) that move throughout the battlefield can provide courier service between critical nodes.

(TA 4.1.2 Manage Means of Communicating Information)

TREND 8: Army airspace command and control (A2C2), integrated combat airspace command and control (ICAC2).

OBSERVATIONS:

1. Understanding and proper utilization of army airspace command and control (A2C2) procedures are lacking.

2. Aircrews and aviation planners are unfamiliar with airspace control order, air tasking order information, and applicability.

RESULTS:

1. This situation often leads to a failure to plan missions around existing airspace constraints or in conjunction with existing airspace control measures.

2. Airspace command and control affects the entire depth of the battlefield and often requires early planning emphasis to deconflict and ensure mission success.

3. Aircrews and aviation planners must understand the implications of airspace control measures and standard graphics control measures on mission accomplishment.

Techniques:

1. Units should incorporate airspace control order and air tasking order training into Home Station training programs and exercises. Mission planning timelines should include checklists to ensure planners deconflict existing and potential airspace control measures early to ensure mission success.

2. Refer to **FM 1-113, *Cargo Helicopter Operations***, which includes an initial planning conference checklist that works as a good template and includes information required for most missions, not just air assaults. At a minimum, the S-3 shop, brigade liaison officers (LNO), company commanders, and pilots in command should understand the requirements of airspace command and control and ensure the implementation of **FM 100-103, *Army Airspace Command and Control in a Combat Zone***, in all phases of mission execution. JCS Pub 3-52 discusses airspace command and control in a joint combat environment.

(TA 4.1.3 Maintain Information and Force Status)

TREND 9: Battle-tracking and reporting.

OBSERVATIONS: Commanders habitually have difficulty in making sound, timely decisions due to a lack of available information.

RESULTS:

1. Subordinate battalion S-2 sections should be trained to report by named area of interest (NAI). If this does not occur, junior members within the brigade S-2 section should have adequate visibility on assigned NAI to determine if incoming information is appropriate and should be posted.

2. Often a vital piece of information is in possession of the unit, but is not part of the commander's decision process because it was not reported or was lost somewhere in the battle-tracking system.

3. The hesitation to report is compounded by the all-too-frequent disappearance of information within the TOC or TAC.

Techniques:

1. S-2 sections at brigade and battalion must develop a tracking tool for ensuring collection plan execution within the TOC or TAC. Quite simply, this could be a NAI overlay with the associated collection plan attached.

2. A clear, universal understanding of the commander's critical intelligence requirements (CCIRs) and effective information management techniques within TOCs/TACs can greatly reduce the danger of making decisions without the benefit of all critical information.

(TA 4.1.3 Maintain Information and Force Status)

TREND 10: Battle-tracking significant legal actions during deployment.

OBSERVATION: During any deployment, events will occur that will require investigation, be it by commander's inquiry or an informal AR 15-6 investigation. Often the brigade operational law team (BOLT) records these events and all other related matters on DA Form 1597 (daily log). Some matters, such as AR 15-6 investigations, are time sensitive or have

command interest. These actions must be closely monitored to ensure suspense dates are being met.

RESULTS:

1. Daily logs get cumbersome quickly, and information retrieval becomes a time-consuming, often frustrating, event.
2. Additionally, since the action being tracked is buried in the log, it is out of sight and, therefore, typically forgotten.

Technique: Use a simple chart, posted in open view at the tactical operations center, to track significant legal actions. Suggested headings across the top of the page are as follows:

<u>DTG and Incident</u>	<u>CDR's INQ. Appointed</u>	<u>Inv. Officer</u>	<u>Date Suspense</u>	<u>Date Reviewed</u>	<u>Forwarded</u>
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Be careful of the data entered in this chart as some investigations may be sensitive.

(TA 4.1.3 Maintain Information and Force Status)

TREND 11: Situational awareness of military police (MP) platoons.

OBSERVATIONS:

1. Many MP platoons experience difficulty with situational awareness because they do not have a system in place to battle-track and manage information.
2. Battle-tracking in platoon command posts inadequately provides squad leaders with visibility of enemy locations, friendly unit dispositions, and the current status of combat operations throughout the battlefield.

RESULTS:

1. Squad leaders rarely provide route or area reconnaissance overlays and do not report sufficient information to platoon leaders.
2. Soldiers lack mission-essential information and do not always know where they are in relation to the threat.
3. During operations, the platoons do not always use adequate control measures (i.e., phase lines, checkpoints, or rally points) to internally track progress or to report locations to the higher command and control element.

Techniques:

1. The platoons should provide the brigade with the information necessary to have resolution of location, current status, and missions of the military police (MP) units on the battlefield.
2. The military police platoon should be considered during the brigade's clearance of fires drills. In the platoon command post, track the current brigade operation to the resolution necessary to provide squad leaders with information to plan and conduct operations and prevent fratricide.
3. Use control measures and accurate movement information to track progress of subordinate units and to give higher units resolution of the progress of MP units on the battlefield.

4. Disseminate and provide feedback on the priority intelligence requirements (PIR) and commanders critical information requirements (CCIR). Require squad leaders to submit timely situation reports (SITREPs) and route reconnaissance reports. Teach individual soldiers and leaders how to identify, report, disseminate, and react to the many threats that make up the battlefield while remaining aware of their immediate surroundings.

(TA 4.1.3 Maintain Information and Force Status)

TREND 12: Mission tracking and situational awareness of medical units.

OBSERVATION: Few medical staffs have any expertise in tracking and analyzing events to discover trends that may indicate pending hostile actions against the unit. Simple analyses may show hostile forces approaching from the same direction or the same general time and allow the unit to take additional protective measures against the threat.

RESULT: Failure to track events causes decreased situational awareness. This hinders the ability to anticipate the locations where significant casualties are likely. Also, the medical unit's own survivability may be unnecessarily jeopardized.

Techniques:

1. Soldiers must learn all common tasks appropriate for their grade. The Army assumes all soldiers understand and can execute common tasks regardless of their military occupational specialities (MOS).
2. Leaders must instill the skills and confidence in subordinates to survive a level one threat. Leaders must also understand the fundamentals of defense and use appropriate measures to protect facilities.
3. Understanding **STP 21-1 SMCT, Soldier's Manual of Common Tasks Skill Level 1**, would greatly enhance a medical unit's ability to protect itself against a threat.

(TA 4.1.3 Maintain Information and Force Status)

TREND 13: U.S. Army Reserve (USAR) support element battle-tracking.

OBSERVATION: Reserve component corps support groups and corps support battalions staffs are not, for the most part, familiar with battle-tracking and how this process, in conjunction with asset visibility, can enhance customer support.

RESULT: Most staffs have trouble assimilating and translating intelligence and operational products into valuable information that can assist in anticipating requirements.

Technique: The support operations section, if working properly, will track all assets provided by the companies. The S-2 will provide the latest intelligence on the threat and what impact threat actions will have on the unit and its ability to support. The S-3 will provide the latest

update for the next operation. When combined and analyzed, these elements will provide enough information on current requirements, possible future requirements, and assets on-hand to satisfy those requirements. This will enable the unit to anticipate and be proactive versus reactive.

(TA 4.1.3 Maintain Information and Force Status)

TREND 14: Tracking logistical support.

OBSERVATION: One of the most challenging aspects of logistical support is to track each mission from beginning to completion. Many support operations shops have the basic tools displayed but seldom use them properly for the purpose of mission tracking.

RESULT: After the first few missions, tracking fades into following only those missions that are yet to start point (SP). The support operations section needs to have visibility of all missions. The biggest problem is the mission closeout. The company accomplishing the mission seldom closes the loop with the support operations section. Without closure, the support operations section will not have a good picture of what assets are available to support future missions.

Technique: One possible solution is to have a trip ticket that the support driver can fill in after returning from the company forward position to the support operations section. The support operations section can then update their boards with up-to-date information.

(TA 4.1.3 Maintain Information and Force Status)

TREND 15: Tracking friendly unit positions.

OBSERVATION: Battalions are consistently unable to keep track of all friendly units operating in their zone. Although the tactical operations center (TOC) generally has a good view of where its organic subordinates are on the battlefield, it often lacks awareness of brigade or division forces deployed within the battalion's boundaries. The often-seen, but usually unsuccessful, technique is for the ADA company commander to keep the avenger under brigade control and position the asset in sector without coordination.

RESULT: This leads to clearance of fires problems and increases the probability of fratricide.

Techniques:

1. Battalion TOCs must be proficient in battle-tracking techniques. Specific techniques are discussed in **CALL Newsletter No. 95-7, Tactical Operations Center**, May 95.
2. Brigades should not assign units missions within battalion sectors without designating a command relationship or issuing specific coordinating instructions. For example, the brigade air defense artillery (ADA) officer wants to employ an Avenger in a battalion sector to cover a likely enemy avenue of approach. A more effective technique would be to task-organize the Avenger to the battalion and give the battalion the specified task of denying the air avenue of approach. This method achieves both the desired tactical effect and forces the appropriate coordination.

(TA 4.1.3 Maintain Information and Force Status)

TREND 16: Air assault unit planning synchronization. Synchronize planning events that lead up to H-hour. It is essential that the planning timeline for an air assault be thought out in sufficient detail to allow units time to complete assigned tasks.

OBSERVATION: Condensed timelines often hinder the success of an air assault.

RESULT: Mission execution is jeopardized because key pieces of information are left out of the plan. Too often units fail to parallel plan and execute key events specified in the air assault planning.

Technique: Unit commanders and staff need to have an understanding of where they fit into the scheme (air assault planning process).

(TA 4.3 Determine Actions)

TREND 17: Planning detail. Operations planning by the battle staff often lacks sufficient detail to allow accomplishment of the mission even when there is enough planning time. However, when detail planning time is limited and planning steps are compressed or when some planning is conducted concurrently, the detail needed to accomplish the mission is the same or worse.

OBSERVATION: The dilemma presented to units at the JRTC is how to compress the planning steps without inadvertently leaving out details necessary for mission success.

RESULT: Units end up omitting key details from their plan or giving a cursory glance at requirements. This results in missed H-hours, incomplete loads, refuel problems, unsuitable landing zones (LZs), and missed LZs.

Technique: Units must review their standing operating procedures (SOPs) and update procedures outlined in those documents that can speed up the planning process. Standardized shortcuts, charts, and key information posting are key in updating everyone in the tactical operations center (TOC) on important planning considerations in planning air assault missions.

(TA 4.3 Determine Actions)

TREND 18: Reverse planning by air assault units.

OBSERVATION: Too many air assault units do not use the reverse planning process that is integral to successful planning.

RESULT: Unit planning is not coordinated nor efficient.

Techniques:

1. The reverse planning sequence used to plan for an air assault is a proven checklist of requirements that allows all the "blocks to be checked" for a successful mission.
2. The initial plan starts with the ground tactical plan that drives the development of the remaining plans.

3. The other plans, in order, are the landing plan, the air movement plan, the loading plan, and the staging plan. Since all of these plans are interrelated, **they should not be planned independently, but sequentially, as outlined in the reverse planning process.** A basic understanding of these plans alone will not ensure success.

4. All units involved in the process must know how and when they play a part in the planning.

(TA 4.3 Determine Actions)

TREND 19: Time.

OBSERVATIONS: During offensive operations, some air assault units purposely sacrifice planning time to initiate an offensive operation earlier than the enemy anticipates. Time needs to be allocated to plan, prepare, brief written orders, and rehearse.

RESULT:

1. Often air assault battalions use 6 to 10 hours to conduct battalion-level troop-leading procedures, and from 2 to 8 hours for company- and platoon-level preparations.
2. Company orders are unclear on the plan below the battalion level and on platoon orders that offer almost no resolution on how the platoon will accomplish its own mission.

Techniques:

1. The air assault task force commander (AATFC) has the responsibility for ensuring adequate time for the staff planners and, most importantly, the aircrews. The AATFC ensures adequate time for the troops by carefully constructing the timeline to be followed from receipt of the order to H-hour.
2. Although the early initiation of operations offers some benefits to the commander, he must recognize and be willing to accept a significant reduction in planning and preparation at subordinate unit levels.

(TA 4.3 Determine Actions)

TREND 20: Brigade aviation Military Decision-Making Process (MDMP). During the brigade MDMP, aviation battalions are not being given information from brigade liaison officers (LNOs) and are not conducting parallel planning. Initial planning efforts should focus on fighter management, maintenance, classes of supply, and possible pick-up zones (PZs)/landing zones (LZs).

OBSERVATION: A common occurrence is for units at brigade and battalion level to miss a window of opportunity to coordinate critical events and establish PZs/LZs.

RESULT: A critical event that needs to occur is the LZ reconnaissance. Often it does not, and the result is unsuitable PZs/LZs at mission execution time.

Technique: Once the brigade course of action (COA) is approved, the attack assets should conduct landing zone (LZ) reconnaissance to feed information needed to finalize the brigade order.

(TA 4.3 Determine Actions)

TREND 21: Wargaming.

OBSERVATIONS:

1. Units continue to experience problems during execution that can be traced back to flawed wargaming. Most staffs execute the wargaming procedure, but do not fully understand why the action-reaction-counteraction methodology is used and what result/product is required before proceeding to the next critical event.

2. Usually, the S-2 and S-3 fight it out at the map board while the remainder of the staff observes in silence. Following the wargaming session, the battle operating system representatives (BOS reps) scramble to create their own plans to support what the battalion wants to do.

RESULT: Mission execution consistently breaks down as enemy actions and friction reveal the lack of coordination and flexibility in the plan. Wargaming is the methodology all units employ in an attempt to synchronize the effects of the BOS integrated into the plan.

Techniques:

1. Synchronization occurs when battlefield activities and their effects are reduced to specific time factors, and then successfully planned, scheduled, and coordinated so that these activities occur at the desired time and place.

2. The staff must specifically identify all critical battlefield activities across the BOS, estimate the time and distance factors for execution, and understand the mutually supporting relationships among them.

3. To effectively and efficiently execute these processes, each staff officer must be an expert in his branch/operating system and come to the wargaming session understanding his BOS capabilities and limitations and with the proper tools to determine and calculate task planning factors.

4. The planning staff should again wargame each of their training missions during staff training immediately following completion of the event. Capitalize on hindsight to prompt identification of critical battlefield activities across the BOS and train (or teach) the individual staff responsibility for determination/calculation of task planning factors. Experiment with methods (avenue, belt, box) and recording techniques (narrative, worksheet, synch matrix).

5. The executive officer must facilitate the wargame and also enforce the standard for staff participation/input.

6. References: **FM 7-20, *The Infantry Battalion***, pp. 2-18 to 2-20; **and FM 101-5, *Staff Organization and Operations***, pp. 5-16 to 5-24.

(TA 4.3 Determine Actions)

TREND 22: Operational control (OPCON) relationship. At times, aviation task forces are told to "OPCON" attack or cavalry assets to Infantry battalions for specific phases of a mission for several days to facilitate search and attack operations. In either case, commanders and S-3s have not given the necessary liaison officer (LNO) to the supported unit to properly integrate the "OPCON" assets into the Military Decision-Making Process (MDMP) to support the commander's intent.

OBSERVATION: The teams of aircraft will "check-in" with the supported unit on their command net and ask what the mission is. This obviously will not and has not worked for the supported unit.

RESULT: It is not reasonable to expect both the supported unit and the aircrews to execute with any level of understanding or synchronization to meet the commander's intent, much less meeting the success criteria for mission success.

Technique: A recommendation is that when told to "OPCON" attack or cavalry assets to a supported unit, the unit provides an LNO who is doctrinally sound (platoon leader or senior warrant officer), properly outfitted (use an LNO checklist), and has sufficient time to get integrated in the supported unit's MDMP to make a difference.

(TA 4.3 Determine Actions)

TREND 23: Battle rhythm.

OBSERVATIONS:

1. The lack of a clear battle rhythm at battalion and brigade levels regularly results in a series of haphazard fragmentary orders (FRAGOs) published at unpredictable times.
2. Battalion staffs plan no more than a few hours into the future; consequently, companies have little or no time between receipt of mission and the required execution time.
3. Tactical operations centers (TOCs) are struggling with establishing and maintaining a worthwhile battle rhythm for the staff to effectively work and not fall behind various timelines.

RESULTS:

1. FRAGOS that direct subordinate units to conduct missions in a hurry.
2. The effect of short-term planning is magnified at the platoon level, where a platoon order with more than a vague concept of the company operation is rare.
3. The battle staff is left not knowing or understanding all of the daily events (i.e., reports, updates, orders, shift changes) that should occur within the TOC.

Techniques:

1. To be effective, battalion staffs must be looking at least 24 hours into the future, not planning this afternoon's activities.
2. Primary staff need to thoroughly read and understand the tactical standing operating procedures (TACSOP) or fire support SOP and coordinate through the battalion executive officer to establish a meaningful and functional battle rhythm (nothing more than a daily schedule of events).

3. A battle rhythm should consider when the S-3 plans on briefing the fragmentary order (FRAGO) for the next day's mission to the subordinate companies. This process should include a planning cycle that includes sufficient time for all subordinate elements to plan, prepare, and execute.

(TA 4.3 Determine Actions)

TREND 24: Air defense unit Military Decision-Making Process (MDMP).

OBSERVATIONS:

1. Most batteries experience significant difficulties due to a lack of understanding of the MDMP.
2. Air defense officers are unable to integrate the air defense plan with the brigade's scheme of maneuver. The aerial portion of the intelligence preparation of the battlefield (IPB) lacks detail and continuous refinement.

RESULTS:

1. This results in task organizations that are ineffective against the enemy air threat and creates reactive versus proactive positioning.
2. It also accounts for improper positioning of teams to gain early engagement, ineffective early warning planning, and command and control.
3. The enemy is able to conduct reconnaissance and resupply missions successfully.

Technique: Air defense leaders must become familiar with the MDMP as outlined in **FM 101-5, Staff Organization and Operations**. Effective use of products during MDMP will facilitate production of warning orders, platoon orders, and necessary fragmentary orders.

(TA 4.3 Determine Actions)

TREND 25: Heavy team integration during low-intensity conflict operations.

OBSERVATION: During low-intensity combat operations in restrictive terrain, heavy teams are assigned a task/purpose, task organization, and command relationship that fails to maximize their capabilities of mobility, protection, and firepower, or provide adequate support to the brigade's movement-to-contact and search-and-attack operations.

Techniques:

1. Effective armor operations in restrictive terrain require combined arms task organization. Attach light infantry or operational control (OPCON) of aviation assets to heavy teams for operations in restrictive terrain.
2. Task and purpose for armor units should maximize use of available countermining equipment (mine plows and rollers, mechanized engineer platoon). **FM 71-1, Tank and Mechanized Infantry Company Team**, lists the following doctrinal missions or operations for heavy teams.
 - Open and secure routes.
 - Conduct convoy escort.

- Establish checkpoints.
 - Deliberate and in-stride breach.
3. Task-organize Bradley or cavalry fighting vehicle platoons or sections to light infantry companies for use as a fixing or finishing force during search-and-attack operations to maximize the potential of the 25-mm chain gun as a light infantry support weapon.
 4. Refer to **CALL Newsletter No. 98-10, *Fighting Light/Heavy in a Restricted Terrain***, for tactics, techniques, and procedures (TTP) related to these operations.

(TA 4.3 Determine Actions)

TREND 26: Light cavalry troop integration.

OBSERVATION: Brigade commanders and staffs are assigning missions to light cavalry troops which are outside the doctrinal mission profile of a light cavalry troop. A ground cavalry troop is a specialized unit with a unique organization, capabilities, and doctrine specifically designed to perform reconnaissance and to provide security in close operations.

RESULT: Light cavalry troops are assigned only limited reconnaissance and security tasks which primarily consist of guarding the perimeter of critical assets. Tasks assigned are not maximizing the unit's reconnaissance and security capability.

Techniques:

1. In movement-to-contact operations, use the light cavalry troop as a brigade detect asset in the targeting/synchronization process.
2. Assign tasks through fragmentary orders or the reconnaissance and surveillance matrix to focus cavalry troop reconnaissance on priority intelligence requirements (PIR) in support of anticipated battalion maneuver 48 to 72 hours out.
3. To protect the brigade's critical assets, assign the light cavalry troop an area security mission, with appropriate terrain, in accordance with **FM 17-95, *Cavalry Operations***. Area security allows the light cavalry platoon or troop to patrol, defend, reconnaissance, or attack in order to protect a critical asset.

(TA 4.3 Determine Actions)

TREND 27: Template development. Development of the decision support template (DST) forms the basis for deciding which named areas of interest (NAI) to assign among the multiple "red icons" displayed on the situation template. The focus for DST development is to identify those critical decisions which the commander may need to make during the battle. Such events, as outlined in **FM 101-5, *Staff Organization and Operations***, may influence, but are not limited to, such critical decisions as: location and commitment of the reserve, location of the commander and his headquarters (HQs), and launching of a counterattack. During movement-to-contact operations, critical decisions may relate to shifting of the main effort, repositioning of the Q36 firefinder radar, and reprioritizing high-payoff targets (HPTs).

OBSERVATIONS:

1. At the brigade and battalion level, NAIs which relate to enemy courses of action (COA) must directly reflect these types of key decisions which are brought out during the wargaming/DST development phase.
2. The wargaming process highlights the development of HPTs. HPTs are those targets whose loss to the enemy will contribute to the success of the friendly COA (FM 34-130). Once the HPTs are developed by the staff, the decision is made as to where these targets can best be interdicted.

RESULTS:

1. Often NAIs are not related to enemy COAs.
2. These NAIs are labeled as targeted areas of interest (TAIs) or may even be identified as objectives for certain operations.

Techniques:

1. This process highlights the linkage between priority intelligence requirements (PIR), named areas of interest (NAI), and HPT: they all must be synchronized to ensure that the commander makes key decisions at the right time and place on the battlefield.
2. NAIs must, therefore, be linked to a decision and/or priority target. This is further reinforced in **FM 7-20, *The Infantry Battalion***, which states, "The commander and his subordinates rely on intelligence preparation of the battlefield (IPB), a sound reconnaissance and surveillance (R&S) plan and accurate reports to *quickly understand enemy intentions*."

(TA 4.3 Determine Actions)

TREND 28: Staff synchronization and battle rhythm.

OBSERVATIONS:

1. Brigade battle rhythm is not structured to facilitate decisions by the commander.
2. The staff is not synchronized with the commander, and the commander's guidance is not included as part of the targeting process or staff huddles.

RESULTS:

1. The commander is not updated in a timely manner on the results of these meetings, which prevents him from seeing the battlefield.
2. As a result of this failure to establish a rhythm, the efforts of the staff are flawed and do not accurately reflect the commander's guidance.

Technique: Train to and follow the Military Decision-Making Process (MDMP), and refer to **CALL Newsletter No. 95-12, *Military Decision Making***, May 97.

(TA 4.3 Determine Actions)

TREND 29: Integration of battalion task force engineers.

OBSERVATIONS:

1. Supported battalion staffs continue to exhibit an inability to integrate attached engineer platoon leaders into the battalion tactical operations center (TOC) and staff planning process.

2. The inexperience of most engineer second lieutenants who also serve as platoon leaders contributes to the difficulty of integration and synchronization.

RESULTS:

1. Battalion staff officers do not assist the engineer in performing his duties as a staff member.
2. The engineer is either not consulted at all during planning or is "confined" to the TOC and not allowed to supervise and synchronize execution of missions assigned to his platoon.
3. The end result is poor synchronization of mobility and survivability operations at battalion.

Techniques:

1. Task force commanders and staffs must understand that the supporting task force engineer cannot be present in the TOC at all times.
2. The task force executive officer must ensure that the supporting task force engineer is integrated into the Military Decision-Making Process (MDMP) and targeting process.
3. The task force engineer must support task force planning and aggressively supervise his platoon during execution.

(TA 4.3 Determine Actions)

TREND 30: Combined arms obstacle integration.

OBSERVATIONS:

1. Brigade and battalion staffs do not understand the fundamental relationship between fires and obstacles as outlined in **FM 90-7, Combined Arms Obstacle Integration**.
2. Infantry leaders are not proficient in siting tactical obstacle groups to influence enemy maneuver.
3. Soldiers are not proficient in emplacing protective obstacles.
4. Obstacle emplacement is not tracked at battalion level, so the commander does not adjust his plan based on actual battlefield conditions.

RESULTS:

1. This results in poor execution of defensive operations.
2. Direct and indirect fires are not integrated with the obstacles.
3. Obstacle construction is unnecessarily delayed because infantry units are slow to occupy sectors or battle positions, directed obstacles are not used to support battalion/brigade decisive points, and engineers are routinely tasked to operate battalion Class IV/V points.
4. This lack of adjustment results in minimal delay of assaulting enemy forces.

Techniques:

1. Review **FM 90-7, Combined Arms Obstacle Integration**.
2. Conduct reconnaissance as early as possible during the defense. Site critical, directed obstacles so that engineer effort is not wasted while the staff completes the operations order.
3. Establish procedures that require the task force S-4 and support platoon leader to operate and supervise the Class IV/V supply point.

4. Task maneuver companies with the responsibility for obstacle group construction to ensure that engineers receive assistance with mine dump operations and protective wire emplacement.
5. Comply with obstacle reporting requirements outlined in **FM 20-32, *Mine/Countermine Operations***.

(TA 4.3 Determine Actions)

TREND 31: Combat Service Support (CSS) integration.

OBSERVATIONS:

1. Combat service support (CSS) is consistently an afterthought rather than a vital integrating system.
2. CSS integration must begin at receipt of the mission and must continue throughout the operation.

RESULTS:

1. A poorly synchronized CSS plan routinely disrupts the engagement systems.
2. The CSS planner must participate and clearly understand the maneuver plan to provide continuous support before, during, and after the operation.

Techniques:

1. The S-1, S-4, and special staff officers must participate in every step of the Military Decision-Making Process (MDMP) and continuously refine the personnel and logistics estimates.
2. The executive officer (XO), as the battalion and brigade chief of staff, must rigorously synchronize the CSS BOS and fully integrate CSS in the decision-making process.
3. The commander must carefully assess the effects and risks of CSS on his engaging systems.
4. References include **CALL Newsletter No. 95-12, *Military Decision Making***; **FM 100-5, *Operations***; and **FM 101-5, *Staff Organization and Operations***.

(TA 4.3 Determine Actions)

TREND 32: The targeting process and targeting meetings.

OBSERVATION: Most brigade and battalion staffs do not understand the basic concept of the targeting process and intermittently conduct targeting meetings with no agenda and focus.

RESULT: Most units fail to focus combat power to find, fix, and finish critical high-payoff targets (HPTs).

Techniques:

1. Read and review **FM 6-20-10, *The Targeting Process*** (with emphasis on Chapter 2 and Chapter 5) and the Targeting Process video script in the *JRTC FS DIV TTP Red Book*, 1 Oct 96, page 21, to gain a better understanding of the targeting process and meeting.

2. The battalion executive officer (XO) should open the targeting meeting by detailing its purpose, the agenda, and specifying the time period or event being discussed.

3. The S-2 provides an intelligence update, briefs the current enemy situation, and reviews the current collection, reconnaissance, and surveillance plans. The S-2 then provides a battle damage assessment (BDA) of targets previously engaged since the last targeting meeting and the impact on the enemy courses of action. He follows the BDA with an analysis of the enemy's most probable courses of action and locations for the next 12 to 24 hours using the event template and a list of high-value targets. Finally, the S-2 briefs changes to the priority intelligence requirements (PIR) for review by the battle staff.

4. The next briefer is the S-3. He briefs any particular guidance from the commander and changes to the commander's intent. He briefs any requirements from higher headquarters since the last targeting meeting and a review of current operations. Finally, he informs the battle staff on the status of assets available for the targeting process.

5. The final briefer is the fire support officer (FSO). He briefs the status of all delivery assets and reviews the current target synchronization matrix, providing a summary of results of actions taken. He presents the new target synchronization matrix with the proposed list of high-payoff targets (HPTs) and locations for the battle staff's concurrence and refinement. Once any changes to the HPT have been made and any locations updated or refined, the maneuver XO or S-3 facilitates a BOS crosswalk to complete the remainder of the matrix by identifying a detector, determining an attack means, and assigning an asset to assess each HPT.

6. Upon completion of the targeting meeting, the XO, S-3, S-2, and FSO brief the commander on the results for his approval. Once the results are approved, the following products are updated, written, and reproduced for timely distribution:

- Target synchronization matrix
- FRAGO to subordinate units
- Updated target list
- Updated reconnaissance and surveillance (R&S) plan
- Any changes to commander's PIR

(TA 4.3 Determine Actions)

TREND 33: Integration of aviation assets.

OBSERVATIONS:

1. The difficulty of integrating AH-64s and OH-58Ds into the scheme of maneuver, particularly during the movement-to-contact and attack phases, continues to frustrate commanders and leads to relatively ineffective employment.

2. The root cause of this difficulty appears to be the failure on the part of ground commanders to plan in detail for aviation employment and assign an appropriate task and purpose.

RESULT: There seems to be an unwillingness on the part of aviation commanders to place assets under operational control (OPCON) to ground commanders.

Techniques:

1. Like infantry companies, AH-64 and OH-58D teams should be assigned a doctrinally sound task and purpose with specific graphics to support employment. Example: Support by fire from position 1 in order to suppress suspected enemy platoon with machine-gun vic grid 123456. Placement of aviation assets OPCON to ground commanders for specific, pre-designated windows permits development of clear tasks and purposes such as the example above.
2. Assignment of an aviation liaison officer (LNO) is the final piece required for truly integrated employment.

(TA 4.3 Determine Actions)

TREND 34: General doctrinal knowledge.

OBSERVATION: Warrant officers (WO) in the forward support maintenance teams (FSMT) generally lack the doctrinal knowledge and terminology required to successfully take charge of the FSMT.

RESULT: These WOs cannot conduct planning in the FSMT when primary leaders are absent or lost due to illness or combat.

Technique: The program of instruction at the Warrant Officers course should reflect greater emphasis on doctrinal knowledge and terminology.

(TA 4.4 Direct and Lead Subordinates)

TREND 35: Troop-leading procedures.**OBSERVATIONS:**

1. Troop-leading procedures are not effectively executed within batteries and platoons.
2. Often teams are ordered to move and occupy new positions without a clearly stated task and purpose.
3. Batteries and platoons are unable to synchronize their plans due to the lack of backbriefs and rehearsals.

RESULTS:

1. Warning orders and operations orders are not used to facilitate planning, coordination, backbriefs, and rehearsals for subordinate leaders.
2. Teams have very little information concerning moves other than proposed grid coordinates and primary target lines.
3. Timelines detailing critical events are not completed to effectively manage time.

Techniques:

1. **FM 44-44, Avenger Platoon, Section, and Squad Operations**, Appendix D, contains numerous checklists to assist in conducting troop-leading procedures and pre-combat checks.

2. Leaders need to make use of warning orders with timelines to assist subordinates in parallel planning IAW the 1/3 - 2/3 rule. The use of formatted backbriefs and rehearsals will facilitate synchronization and integration.

(TA 4.4 Direct and Lead Subordinates)

TREND 36: Commander's intent.

OBSERVATIONS:

1. Commanders are not formulating useful commander's intents.
2. The key tasks portion of the intent statement is a restatement of the key highlights of the concept of the operation. It should state those essential tasks that the operation depends on as the commander envisions the battle. The key tasks should also be meaningful two levels down.

RESULT: For example, stating a key task as "rapidly deploying combat power" during a forced entry operation does not meet the above criteria. The concept may call for a battalion to seize the flight landing strip (FLS) with another battalion expanding the airhead. Rather, the key task might be stated as "seizing the FLS with at least a rifle company and a mortar section in less than four hours." This latter version conveys a vision of what the commander sees as those tasks that somehow must be accomplished, even as the plan begins to unravel.

Technique: Subordinate leaders at every level must fully understand the concept of operations and the commander's intent for the operation planned. These leaders have to translate this intent into clear, concise, and understandable terms for the soldiers that must execute this order.

(TA 4.4 Direct and Lead Subordinates)

TREND 37: Inadequate unit tactical standing operating procedures (TACSOP).

OBSERVATION: Often units deploy with a TACSOP that marginally addresses NBC matters.

RESULT: Units repeatedly discover shortcomings in their TACSOPs, such as patient decontamination procedures, chemical defense equipment (CDE) equipment reporting, and decontamination site setup.

Techniques:

1. Units must review the NBC portion of TACSOP and ensure they address key and essential activities.
2. Copies or extracts of these TACSOPs must be at all levels in the command, and NBC personnel must have access to them.
3. Brigade and battalion chemical officers must conduct rehearsals with subordinates to ensure that all required actions are understood.

4. References: **FM 3-5, NBC Decontamination Operations**; **FM 8-33, Control of Communicable Diseases in Man**; and **FM 8-285, Treatment of Chemical Agent Casualties and Conventional Military Chemical Injuries**.

(TA 4.4 Direct and Lead Subordinates)

TREND 38: Leader's guidance.

OBSERVATION: Fighting positions are substandard and frequently dangerous to the soldiers that occupy them.

Techniques:

1. Train signal officers and NCOs to use **GTA 7-1-38, Troop-Leading Procedures**, when conducting retransmit (RXMT) operations, and require soldiers to complete formatted backbriefs and pre-combat inspections (PCIs) according to **FM 11-43, The Signal Leader's Guide**.
2. Also reference **GTA 7-6-1, Fighting Position Construction**.

(TA 4.4 Direct and Lead Subordinates)

TREND 39: Integration of mechanized/armor assets by light infantry company commanders.

OBSERVATIONS:

1. Many light infantry company commanders do not understand the capabilities of the M1A1 tanks and BFVs they have attached to them during the light/heavy live-fire exercise and the deliberate attack-trench live-fire exercise.
2. Most commanders leave the development of the mechanized/armor unit's direct fire plan to the platoon leader and fail to even provide adequate guidance.

RESULTS:

1. The mechanized/armor platoon/sections are often left on their own for much of the rehearsal day and usually ignored during the commander's PCIs.
2. Also, many commanders fail to understand the impact of heavy forces upon the maneuver plan and the potential fratricide risk (such as danger zone of the discarded sabot from the M1A1 tank).

Techniques:

1. The first thing that a company commander must do when he receives a mechanized/armor attachment is to meet with the element leader and discuss the following (at a minimum):
 - Manning/task organization
 - Weapons systems available and their capabilities
 - Logistical requirements: ammo, fuel, maintenance, vehicle recovery
 - Communications capabilities
 - Training status/level of proficiency (applicable tasks for the mission)
 - Unique capabilities

2. Commanders must also ensure that the mechanized/armor element leader is included in the planning/wargaming process. The commander must specify what he expects the mechanized/armor unit to accomplish (this may mean precisely targeting specific bunkers, buildings, and sectors of fire).

3. It is crucial that the mechanized/armor unit fully participate in all rehearsals.

4. The commander must conduct pre-combat inspections (PCIs) of the mechanized/armor attachment just as he would for any of his organic rifle platoons.

5. Light infantry leaders can use a tactical pointer to designate targets at night.

6. Soldiers can also use BFVs/tanks as cover if they must advance through an open area.

(TA 4.4 Direct and Lead Subordinates)

TREND 40: Task and purpose.

OBSERVATION: Soldiers want to know and deserve to know why actions are being taken.

RESULT: Soldiers who understand both the task and purpose of their mission will execute their instructions with much more enthusiasm. The "why" of the mission allows leaders at all levels to better understand how their "piece" fits into the big picture of the battle. It also increases awareness of the importance of what may at first seem an insignificant job.

Techniques:

1. Internal communications must be driven by and through the chain of command. Only by enforcing this means of communication can leaders be sure everyone in the unit has the correct information.

2. Clarity of messages must be ensured through proper feedback. Backbriefs are excellent tools as long as they do not become "parroting sessions."

3. Make it a habit to include purpose with task so that soldiers know why actions are required.

(TA 4.4 Direct and Lead Subordinates)

TREND 41: Medical unit pre-combat inspections (PCIs).

OBSERVATION: Once established, inspections by leaders of teams and sections that leave the compound for external missions often are shoddy or nonexistent.

RESULTS:

1. Ambulances depart without strip maps or briefings on road conditions, minefield locations, enemy threats, actions in case of ambush, and frequencies of supporting or supported units (if they have communications capability).

2. Front-line ambulances (FLA) depart without all necessary medical equipment, preventing the driver and crew from providing necessary life support for patients at the scene or en route.

Techniques:

1. Units must establish clear checklists for pre-deployment and pre-mission execution.
2. NCOs must take responsibility for ensuring subordinates have been properly prepared for mission execution.
3. Officers must follow up on guidance given to ensure priorities have been established and carried out.
4. Standing operating procedures (SOPs) can reflect requirements for PCIs but must be checked periodically to ensure the right information is contained in the checklist and changes in equipment or missions is included. For instance, some endemic diseases in a geographic area may require special equipment or supplies that can be added to the checklist for deployment.

(TA 4.4 Direct and Lead Subordinates)

TREND 42: Battle drills and tactical standing operating procedures (TACSOPs).

OBSERVATION: Platoons continue to have difficulty aggressively executing battle drills.

RESULT: The soldiers react to the contact slowly and unrehearsed. Reacting to contact should be instinctive, immediate, and rehearsed.

Technique: Units should train on battle drills outlined in **ARTEP 19-100-10-DRILL**, and drills developed for internal tactical standing operating procedures (TACSOPs).

(TA 4.4.1.1 Develop and Complete Plans or Orders)

TREND 43: Forward logistics element (FLE) operations.**OBSERVATIONS:**

1. Forward logistics element (FLE) operations are failing to become combat multipliers for brigades.
2. Typical weaknesses include lack of task and purpose, failure to integrate all battlefield operating systems (BOS) elements into the composition, and lack of participation and/or attendance by key players at rehearsals.
3. Other weaknesses include failure to follow an established SOP, lack of clear command, control, or communications (C3), and failure to ensure the unit is on the brigade's execution checklist.

RESULT: The FLE is not treated as a combat operation and is often scheduled so late in the brigade's planning process that it has little or no effect on actual execution.

Techniques:

1. The brigade S-4, S-1, and the forward support battalion (FSB) support operations officer must take the lead to ensure that the FLE is properly resourced and that it is integrated into the brigade's scheme of maneuver.
2. Treat the FLE operation as a combat operation and integrate all BOS and tactical logistics functions into its composition.

3. Plan for a separate FLE rehearsal.
 4. Refer to **FM 63-1, Support Battalion and Squadrons, Separate Brigades and Armored Cavalry Regiments**; Chapter 1 provides a thorough and useful guideline for this procedure.
-
- (TA 4.4.1.1 Develop and Complete Plans or Orders)*

TREND 44: Fire support rehearsals.

OBSERVATIONS:

1. Once units depart the intermediate staging base, rehearsals are poorly conducted and seldom provide benefit to the operation.
2. Units frequently rehearse prior to operations, but often never move beyond generic or leader-only rehearsals. Surveys over the past two quarters reveal that at the company level, rehearsals cover all mission-essential tasks to be performed only 8% of the time, while companies conduct no rehearsals 39% of the time. At the platoon level, leaders rehearse all mission-essential actions 19% of the time and neglect rehearsals completely 27% of the time.
3. Fire supporters are not integrated into the "maneuver" rehearsal as recommended in **FM 7-20, The Infantry Battalion**, and most fire support rehearsals result in only a confirmation of the planned target list.

RESULT: Rehearsal techniques listed in **FM 6-20-1, Tactics, Techniques, and Procedures for Field Artillery Cannon Battalion**, are not being used.

Techniques:

1. Develop a sound SOP to cover the essential elements of a rehearsal.
2. Integrate fire support into the "maneuver" rehearsal. Each commander and fire support officer (FSO) should succinctly describe the actions as each unit fights with maneuver and fires.
3. The FSO must be able to describe what enemy or maneuver action will trigger a specific fire support task/event. A walk-on terrain model is usually worth the required time to construct it.
4. Review **FM 6-20-1**, pages 3-12 through 3-15. This source provides an excellent overview of key rehearsal elements. A solid SOP, checklist, or agenda, reinforced by Home Station training, would greatly improve rehearsals.
5. The lack of rehearsals specifically tailored to the tasks to be performed often results in reduced proficiency during the mission.
6. Reference: **CALL Newsletter No. 98-5, Rehearsals**, Mar 98.

(TA 4.4.1.1 Develop and Complete Plans or Orders)

TREND 45: Unified maintenance.

OBSERVATION: Maintenance units that are sliced together in a contingency operation assigned to a light infantry brigade have difficulty unifying the maintenance effort for the aviation battalion. Each unit assigned to the aviation battalion brings a maintenance element to support its aircraft.

RESULT: In the operations order, one of the maintenance companies is assigned the task of reporting the status of the assigned aircraft to the battalion commander. The production control element of the assigned company often has difficulty getting timely and accurate reports from other maintenance elements.

Technique: One way to correct the problem is to attach maintenance personnel, technical inspectors, and test pilots from other units to the unit responsible for reporting aircraft status to the battalion commander.

(TA 4.4.1.1 Develop and Complete Plans or Orders)

TREND 46: Chemical asset integration.

OBSERVATION: Many brigades are not using NBC assets with the best possible task and purpose.

RESULTS:

1. Decontamination, smoke, and reconnaissance assets are repeatedly left performing missions such as convoy escort, reverse osmosis water purification unit (ROWPU) security, manning of tactical command posts (TCP), and troop transportation missions. These are viable missions when no NBC threat is present, but as the situation changes and the threat warrants, NBC assets should be used in enhancing force protection.
2. There are many instances where smoke assets could be combat multipliers but are often omitted.
3. Additionally, there are instances of units being slow in relinquishing control of chemical assets (platoon is a part of the forward support battalion (FSB) perimeter and the commander not wanting to give up the asset) when directed, therefore hindering the NBC fight. By the time a persistent chemical strike happens, decontamination response is slow because the decontamination plan never matured. This is basically a result of the brigade not executing proactive decontamination site reconnaissance.

Techniques:

1. Chemical officers must stress the proper use of NBC assets during the planning of operations and then check to ensure that assets are being used as intended. Situational awareness is paramount, and a thorough understanding of upcoming operations is the key to integration of NBC assets.
2. **FM 3-100, NBC Defense, Chemical Warfare and Flame Operations**, gives a good basis for the doctrinal employment of NBC assets.

(TA 4.4.1.2 Coordinate Support)

TREND 47: Employment of retransmission teams (RXMT).

OBSERVATIONS:

1. Signal leaders are not familiar with the staff coordination.
2. Signal soldiers on RXMT teams are not familiar with signal site security.

Techniques:

1. Reference **FM 11-43, *The Signal Leader's Guide***, Figure A-3, and **FM 101-5, *Staff Organization and Operations***, for staff coordination.
2. Reference **FM 11-43, *The Signal Leader's Guide***, for site selection and RXMT team employment.

(TA 4.4.1.2 Coordinate Support)

TREND 48: Safety briefings.

OBSERVATION: Proper safety/convoy briefing of personnel prior to executing a jump forward area rearming/refueling point (FARP). It is imperative that all personnel departing for the jump FARP know grid locations, enemy situation, and scatter plans prior to departure.

RESULT: This prevents confusion in the event of separation during convoy or attacks.

Technique: Unit tactical standing operating procedures (TACSOPs) should address safety briefings for all hazardous activities specific to that type of unit.

(TA 4.4.3 Provide Command Presence)

TREND 49: Pre-deployment/pre-combat inspections (PCIs).**OBSERVATION:**

1. Invariably units arrive at the JRTC missing vital pieces of equipment or parts necessary to put equipment into operation.
2. International standard of organization (ISO) shelters and their contents are often not inspected prior to deployment.
3. Preventive maintenance check and services (PMCS) are seldom accomplished on medical equipment until after the unit is established in the field.

RESULT:

1. The absence of items as simple as computer disks, electrical connectors, keys to oxygen cylinders, or extension cords for key areas can cripple a unit.
2. Units are surprised to discover missing essential equipment once they begin to set up.

Techniques:

1. Units must establish clear checklists for pre-deployment and pre-mission execution. NCOs must take responsibility for ensuring subordinates have been properly prepared for mission execution.
2. Officers must follow up on guidance given to ensure priorities have been established and carried out.
3. SOPs can reflect requirements for pre-combat inspections (PCIs) but must be checked periodically to ensure the right information is contained in the checklist and reflects changes in

equipment or missions. For instance, some endemic diseases in a geographic area may require special equipment or supplies that must be added to the checklist for deployment.

(TA 4.4.4 Maintain Unit Discipline)

TREND 50: Integration and synchronization with brigade staff.

OBSERVATION: Most brigade operational law teams (BOLT) have not been to the field and operated as a member of the brigade staff in that environment.

RESULT:

1. Other staff members often do not understand the Judge Advocate (JA) role on the staff or what issues that should be reported to the JA.
2. The JA who is new to this environment does not know who has information that affects his area of responsibility and where or how to find that information.

Technique:

1. The BOLT should take every opportunity to go to the field with the unit and train with them as part of the staff. The JA should brief significant legal information or actions at the commander's update and shift change briefings. Often the JA is not listed as a briefer or attendee at these sessions in the brigade tactical standing operating procedures (TACSOP) or TOCSOP. The JA should review these documents and submit changes as necessary to legitimize JA presence at these meetings.
2. The JA should attend the planning and targeting meetings that are a part of the Military Decision-Making Process (MDMP).
3. The JA should post a significant acts board at his station and review it several times a day. He should also review other battlefield operating systems (BOS) areas to see what events have happened that may affect his operations.

(TA 4.4.5 Synchronize Tactical Operations)

TREND 51: Staff integration and synchronization.

OBSERVATIONS:

1. At Home Station, the platoon leader, the company commander, and the division provost marshal should conduct informal NCOPD/OPD at brigade on military police (MP) capabilities and employment. They must also ensure that the platoon leadership understands how the brigade uses the tactical decision-making process to plan operations.
2. Platoon leadership must understand where and how they provide input in the planning process to integrate and synchronize MP support into the operation. Leaders must be able to take the information given to the brigade and produce combat orders for the platoon, so that junior leaders can begin their troop-leading procedures and parallel planning. The platoon leader must ensure that MP assets are included in the brigade's TACSOP. He must also ensure that his recommendations on the appropriate doctrinal MP missions, command relationship, and task organization are used by the staff in developing the plan for the brigade operation. Combined arms operations and working with host nation police will improve operations as well as information sharing and intelligence collection.

3. Proper integration and synchronization of MP assets will prevent many of the 911 missions which are uncoordinated, unplanned, and unrehearsed.

RESULTS:

1. Many unnecessary casualties and lost critical assets are the result of 911 missions. At Home Station, the provost marshal, the commander, and the platoon leader should conduct continuous leader/staff training at brigade on MP capabilities and employment.

2. The MP annex to the TACSOP should describe capabilities, employment considerations, doctrinal missions, prioritization, and specific collective tasks that support the brigade mission essential task list (METL).

Technique: The platoon leader must also ensure that his recommendations on the appropriate doctrinal MP missions, command relationship, and task organization are used by the staff in developing the plan for the brigade operation. Combined arms operations and working with the host nation police will improve operations and information sharing and intelligence collection.

(TA 4.4.5 Synchronize Tactical Operations)

TREND 52: Commander's guidance for fire support.

OBSERVATION: Most commanders, using the format in **FM 6-71, *Tactics, Techniques, and Procedures for Fire Support for the Combined Arms Commander***, write their guidance for fire support using **Purpose, Priority, Allocation and Restriction (PPAR)**. Recently, some commanders have started using **Task, Purpose, Method and Endstate**.

RESULTS:

1. Although fire support officers (FSO) are using the correct formats, many FSOs are poorly conveying the commander's guidance for fire support.

2. The terms **destroy, neutralize, suppress, and harass** are not being used properly. The commander's guidance for fire support is usually vague, does not focus fire support assets, and is not supportable with the fire support assets available.

Techniques:

1. **FM 6-71, *Tactics, Techniques, and Procedures for Fire Support for the Combined Arms Commander***, pg. 3-5, lists the information commanders should provide to FSOs. FSOs must clearly understand the commander's intentions and guidance for the use of fires.

2. **FM 6-20-10, *Tactics, Techniques, and Procedures for the Targeting Process***, states that the effects of fire can be to harass, suppress, neutralize, or destroy the target. The subjective nature of these terms means the FSO must ensure the commander's interpretations of this terminology are realistic and equally understood, and that the commander has the fire support assets available to achieve his attack guidance.

3. FSOs must fully understand the concept of operations and the commander's intentions for the use of fires. FSOs must translate this into clear, concise and understandable terms.

(TA 4.4.5 Synchronize Tactical Operations)

TREND 53: Timelines.

OBSERVATION: The key piece to a timeline is the development of the ground tactical plan that encompasses the organization for combat, fire support, scheme of maneuver, attack/cavalry (CAV) support, and the commander's intent.

RESULT: Planning for the air assault can begin once the air assault task force commander approves a course of action (COA).

Technique: Immediate parallel planning is essential for the successful coordination of all units.

(TA 4.4.5 Synchronize Tactical Operations)